

TEHAMA COUNTY
AND CITIES OF CORNING, RED BLUFF, TEHAMA
unit of the
TRI-COUNTY AREA PLANNING COUNCIL

GENERAL PLAN

ELEMENTS:

safety, seismic safety, noise, scenic highways

1974

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TEHAMA COUNTY and Cities of RED BLUFF, CORNING, TEHAMA

Unit of The

TRI-COUNTY PLANNING AREA GENERAL PLAN

General Plan	Dates Element Adopted By:			
Element	<u>County</u>	<u>Red Bluff</u>	<u>Corning</u>	<u>Tehama</u>
SAFETY and SEISMIC SAFETY:	8-20-74	8-6-74	7-22-74	9-4-74
NOISE:	8-20-74	8-6-74	7-22-74	9-4-74
SCENIC HIGHWAYS:	4-17-73	8-6-74	7-22-74	9-4-74

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Program No. CPA/1032.18

MEMBERS of TRI-COUNTY AREA PLANNING COUNCIL

Counties: TEHAMA, GLENN, and COLUSA

Cities: RED BLUFF, CORNING, TEHAMA, WILLOWS, ORLAND,
COLUSA, and WILLIAMS

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September, 1974

The Honorable Board of Supervisors,
County of Tehama, and the
City Councils of Red Bluff, Corning, and Tehama

Gentlemen:

We are pleased to transmit herewith this report containing the General Plan elements of Safety, Seismic Safety, Noise, and Scenic Highways, which elements were prepared for you by the Tri-County Area Planning Council, and which were revised, processed, and adopted by you in conformity with provisions of California law.

By adoption of the above elements, together with the previous adoption of Land Use, Open Space, Conservation, Circulation, and Housing elements, you have met current State law requirements for General Plan elements.

We wish to thank you and the many local, State, and Federal officials and agency representatives who assisted in the preparation of the studies and plans contained in this report.

Respectfully submitted,
James M. Campbell

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GENERAL PLAN ELEMENTS - SAFETY and SEISMIC SAFETY

I. INTRODUCTION

A. AUTHORITY

State law requires that General Plans include both SAFETY and SEISMIC SAFETY elements which are described in the law as follows:

1. SAFETY ELEMENT (Government Code Section 65302.1)

"A safety element for the protection of the community from fires and geologic hazards including features necessary for such protection as evacuation routes, peak load water supply requirements, minimum road widths, clearances around structures, and geologic hazard mapping in areas of known geologic hazard".

2. SEISMIC SAFETY ELEMENT (Government Code Sec. 65302(f)).

"A seismic safety element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effects of seismically induced waves such as tsunamis and seiches.

"The seismic safety element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure and seismically induced waves".

B. COMBINATION of ELEMENTS

Because of the similarity, and partial duplication, of the purposes and fields of coverage as set forth in the above Code descriptions, the Safety and Seismic Safety elements are treated in combination in this report.

The Safety element coverage is expanded to include or recognize general disaster plans as appropriate.

C. RELATION of ELEMENTS to PLANNING AREA

Both elements relate strongly to natural physical hazards and to the careless or accidental hazards introduced by man. The multi-county planning area ranges from valley, through rolling foothill to high mountain elevations, climatic conditions, and natural vegetation types. Population and physical improvements are concentrated in small incorporated cities and unincorporated towns, and scattered thinly into suburban, ranch and recreational areas. Extensive public ownerships in mountain areas under National Forest, National Park, Bureau of Land Management and other such jurisdictions are substantially unpopulated and undeveloped.

Because of its broad extent and range of natural topography, a broad range of natural hazards exists. Such hazards in this particular planning area may be generally described as minor to moderate. Because of the small centers and spread patterns of population and developments, the man induced hazards may also be rated as minor to moderate at this date.

II. SCOPE and NATURE of the ELEMENTS

A. OBJECTIVE

The objective of the preparation and adoption of the Safety and Seismic Safety elements is to add safety considerations to the active planning processes within the planning area in order to reduce loss of life, injuries, damage to property, economic loss, and social disruption resulting from fire, seismic activity and other possible disasters.

B. PLAN POLICY STATEMENTS

1. Recognition of Hazards

It is recognized that safety hazards exist within the planning area, and that the nature and degree of such hazards varies greatly with respect to particular geographical locations within the area, and as shown in the exhibits section hereof.

Hazards given consideration in this plan, and recognized as requiring protective attention, include:

- a. Seismic (earth shaking, surface rupture, seiches, etc.).
- b. Unstable slopes and soils, mudslides, landslides, subsidence.
- c. Wildfires, range fires, urban fires, explosions, etc.
- d. Floods and overflow inundation.
- e. Indirect hazards or losses resulting from erosion failure to protect economic minerals, etc.

2. Goals for Reducing Hazards

Although the probability or effects of an earthquake may not yet be reduced, most of the other hazards listed

above may be reduced, controlled or eliminated by appropriate action. Such action will be taken in a variety of forms, and generally as follows.

a. The Land Use, Open Space and Conservation elements of the General Plan, in combination, cover all land areas of the Planning area and its legal jurisdictions for purposes of establishing basic general guides for the various desired uses of land, the preservation of open space, and the conservation of resources.

b. The Circulation and Housing elements superimpose more precise plans upon limited land areas for purposes of moving people and goods, and for providing adequate housing for people.

c. The Safety and Seismic Safety elements, together with the Noise and Scenic Highways elements, superimpose additional plans upon particular land areas for purposes of recognizing particular concerns and directing attention to them.

d. Such concerns will receive attention, first, through their identification herein and, second, through corrective, protective and regulatory measures proposed herein.

e. Goals for reducing safety and seismic hazards are those levels of safety at or below acceptable risk which may reasonably be achieved, and at the earliest possible dates.

f. The goal to reduce the possibility of levee failure through preservation and protection of existing berms is a major objective to be promoted with State and Federal agencies for effectuation.

3. Level of Acceptable Risk

In order to achieve the above safety goals and reach levels at or below acceptable risk, measures will be taken to:

a. Avoid the many "Avoidable Risks" which are generally apparent and which may contribute to hazards resulting from carelessness, lack of attention to common safeguards, or failure to conform to existing safety standards.

Public information programs by public safety agencies and public utilities will be effective in reducing such risks.

b. Reduce risks, so far as possible, to the "Acceptable Risk" level, which is a level which may be reached without the imposition of drastic new laws or regulations in order to ensure reasonable public safety.

This level may be reached to a substantial degree in most of the planning area through consistent enforcement of existing codes and regulations pertaining to construction, sanitation, fire zones, land use, land development projects, rural and forest fire safety standards, etc.

Exhibit data contained herein provides a broad new source of information for recognizing potential hazards and either avoiding them or providing for their reduction to acceptable levels.

4. Objectives: Existing and New Structures

As in most of the older development areas of California, the planning area still contains some structures,

both urban and rural, which have existed for a hundred years or more. Most of these are of frame, brick or stone construction, most have withstood storms, floods, fires and/or earthquakes in some degree, some have been renovated to code compliance, and some have historical significance.

a. It is an objective of this plan that such structures, and in particular those of historical value, be preserved so far as may be practical to continue to enhance the pioneer character of the planning area. However, preservation should recognize that renovation may be necessary to meet construction, sanitation and fire safety code standards to ensure that the structures will not constitute hazards to themselves, adjoining structures, and the general public.

b. It is a further objective of this plan that any structures which cannot be brought into conformance with appropriate standards be demolished per provisions of law to eliminate them as hazards, unless they have been designated as having historical value.

c. It is a further objective of this plan that the placement and construction of future structures be carefully monitored not only with respect to existing codes and regulations, but also in consideration of safety and seismic safety factors contained herein and new safety plans and regulations which may become effective as proposed herein.

5. Priorities for Abatement of Hazards

a. Hazards existing in buildings and structures, including schools, hospitals and places of public assembly in addition to residential and commercial structures, shall have a high correction or abatement priority within a short time frame of approximately five years or as otherwise dictated by local conditions.

b. Hazards existing with respect to such features as evacuation routes, needs for emergency equipment, correction of local erosion, landslide conditions, local periodic flooding, construction of fire access routes, fire and fuel breaks, etc. may require a priority rating permitting a longer correction period of to ten years or more as urgency, economic capabilities and other such factors may dictate.

c. Hazards requiring correction or abatement measures related to major flood, erosion, landslide and subsidence controls, to building and highway reconstruction or relocation, and to development of new water sources and distribution systems, etc. may require priorities and timing to fifteen years and longer.

6. Standards for Relating to Other Elements

a. The Safety and Seismic Safety elements shall be considered as dominant elements which impose their effects upon and within other General Plan elements to promote and protect the public health, a broad field of public safety, and the general welfare.

b. City, County, State and Federal agency "Emergency Plans" and related programs developed per State law and State Office of Emergency Services standards and other appropriate authority shall be considered as vital supplementary plans and programs to the Safety and Seismic Safety elements.

C. EXHIBITS, GEOLOGICAL HAZARDS

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1. Summary of Geologic Problems, Chart	9
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NOTES:

1. Large scale maps, Exhibits 5. through 12., detailed descriptions of map data, and files of supplementary seismic data are available for reference in area County Planning Department offices.
2. Geologic-Economic Minerals maps, Plots 1,2,3, and 4, are also available for reference in the above offices. These maps are useful to locate mineral deposits of known or presumed economic value which must be recognized as resources to be protected in the land use and planning process.
3. Data shown on exhibits are taken directly from maps and materials developed by the U.S. Geological Survey and California Division of Mines and Geology, are highly generalized, and broadly emphasize hazards to indicate need for detailed checking of specific locations, as plans are developed and utilized, and as land use and development proposals are processed.

Planning Area	Earthquake Shaking	Flooding	Volcanic Eruption	Fault Displacement	Landslide	Subsidence	Erosion Activity	Expansive Soils	Loss of Minerals
Tehama County	Low	None High C	None Mod NE	Mod Low C	Low High W	None Low C	Mod E Low C High W	Mod E High C Mod W	None High C
Red Bluff	Low	High	None	None	Low	Low	Low	High	High
Corning	Low	High	None	None	Low	Low	Low	High	None
Tehama	Low	High	None	Low	Low	Low	Low	High	None
Glenn County	Low	High None on far W	None	Low W None E	High W Mod C Low E	Low None W	High W Mod C Low E	High Mod W	None High E
Willows	Low	High	None	None	Low	Low	Low	High	High
Orland	Low	High	None	None	Low	Low	Low	High	High
Colusa County	Mod Low NW	High None W	None Low SW	Low W None E	High W Mod C Low E	Low None W	High on far W Mod NW Low E	High Mod NW	None W High E
Colusa	Mod	High	None	None	Low	Low	Low	High	None
Williams	Mod	High	None	None	Low	Low	Low	High	None

High, Moderate, Low and None indicate generalized degree of impact in area.

Mod = Moderate, N== North, S = S, E = East, W = West, C = Central.

HISTORIC EARTHQUAKES, AREA IMPACTS

YEAR of QUAKE:	1868	1872	1892	1906	1950	1952	1959a	1959b	1966
INTENSITY:	VI	X	VIII	VIII-IX	VII	VIII-IX	V	VI	VII
Tehama County	0-I I-IV SE	IV-V VI SE	I-IV 0-I N	IV-V E 0 W	I-IV E	I-IV C	0	I-IV E 0 W	I-IV E 0 W
Red Bluff	0-I	IV-V	I-IV	V-VI (edge)	0	I-IV	0	0	I-IV
Corning	I-IV	VI	I-IV	V-VI	0	I-IV	0	0	I-IV
Tehama	0-I	VI	I-IV	V-VI	0	I-IV	0	0	I-IV
Glenn County	I-IV 0-I NW	IV-V VI E	I-IV N&SW V S & NE	V-VI VI-VII SE	0	I-IV E 0 W	0	I-IV E 0 W	I-IV E 0 W
Willows	I-IV	VI	V	VI-VII	0	I-IV	0	I-IV (edge)	I-IV
Orland	I-IV	VI	I-IV	V-VI	0	I-IV	0	0	I-IV
Colusa County	I-IV V S	IV-V VI E	V VI SE	VI-VII E V-VI W	0	I-IV E&C	0	I-IV E 0 W	I-IV E&C V SE
Williams	I-IV	IV-V	V	VI-VII	0	I-IV	0	0	I-IV

Earthquake intensities and area impacts are Modified Mercalli scale, except 1906 Rossi-Forel.

N = North, S = South, E = East, W = West, C = Central area, O = No Impact.

Two scales for subjectively describing the intensity of earthquakes have been widely used in the past, are used on maps on preceding pages, and are described hereunder. They are the older ROSSI-FOREL Scale, and the more widely accepted and newer Modified MERCALI Scale. The current RICHTER scale measured in Magnitude, is mentioned but not described.

A. THE ROSSI-FOREL SCALE

The most commonly used form of the Rossi-Forel (R.F.) scale reads as follows, in brief summary:

Intensity

- I. Microseismic shock.
- II. Extremely feeble shock.
- III. Very feeble shock.
- IV. Feeble shock.
- V. Shock of moderate intensity.
- VI. Fairly strong shock.
- VII. Strong shock.
- VIII. Very strong shock.
- IX. Extremely strong shock.
- X. Shock of extreme intensity.

B. MODIFIED MERCALI INTENSITY SCALE OF 1931 (Abridged and rewritten) Taken from Richter, 1958.

Intensity

- I. Not felt. Marginal and long-period effects of large earthquakes.
- II. Felt by persons at rest, on upper floors, or favorably placed.
- III. Felt indoors. Hanging objects swing. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earth quake.
- IV. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking

the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frames creak.

- V. Felt outdoors; direction estimated. Sleepers wakened. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rate.
- VI. Felt by all. Many frightened and run outdoors. Persons walk unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells ring (church, school). Trees, bushes shaken (visibly, or heard to rustle - CFR).
- VII. Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices (also unbraced parapets and architectural ornaments - CFR). Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
- VIII. Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Cracks in wet ground and on steep slopes.
- IX. General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. (General damage to foundations - CFR). Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluviated areas sand and mud ejected, earthquake fountains, sand craters.
- X. Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
- XI. Rails bent greatly. Underground pipelines completely out of service.
- XII. Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown about.

III. MAJOR EARTHQUAKESA. MAJOR EARTHQUAKES OF CALIFORNIA AND NEVADA
(Intensity given in modified Mercalli Units)

<u>Location</u>	<u>Date</u>	<u>Intensity</u>
California Earthquake, Off-shore Ventura	December 12, 1812	X
San Francisco Earthquake	June, 1838	X
Southern California Earthquake, Fort Tejon	January 9, 1857	X-XI
Owens Valley Earthquake	March 26, 1972	X-XI
San Francisco	April 18, 1906	XI
Nevada Earthquake	September 2, 1915	X
Western Nevada Earthquake	December 20, 1932	X
Imperial Valley	May 18, 1940	X
Kern County	July 21, 1954	
San Fernando	February 9, 1971	IX

B. STRONGER EARTHQUAKES, SACRAMENTO DISTRICT (1855-1960)
(Intensity given in modified Mercalli Units)

<u>Location</u>	<u>Date</u>	<u>Intensity</u>
Downieville Buildings shaken severly.	January 24, 1855	?
Nevada City Strong shock--no details known. May have been of destructive intensity.	December 1, 1867	?
California-Nevada Series of shocks in interior California.	May 29, 1868	?
Downieville The "most severe" shock ever experienced up to that time. Also felt at Grass Valley and Sacramento.	December 20, 1869	?

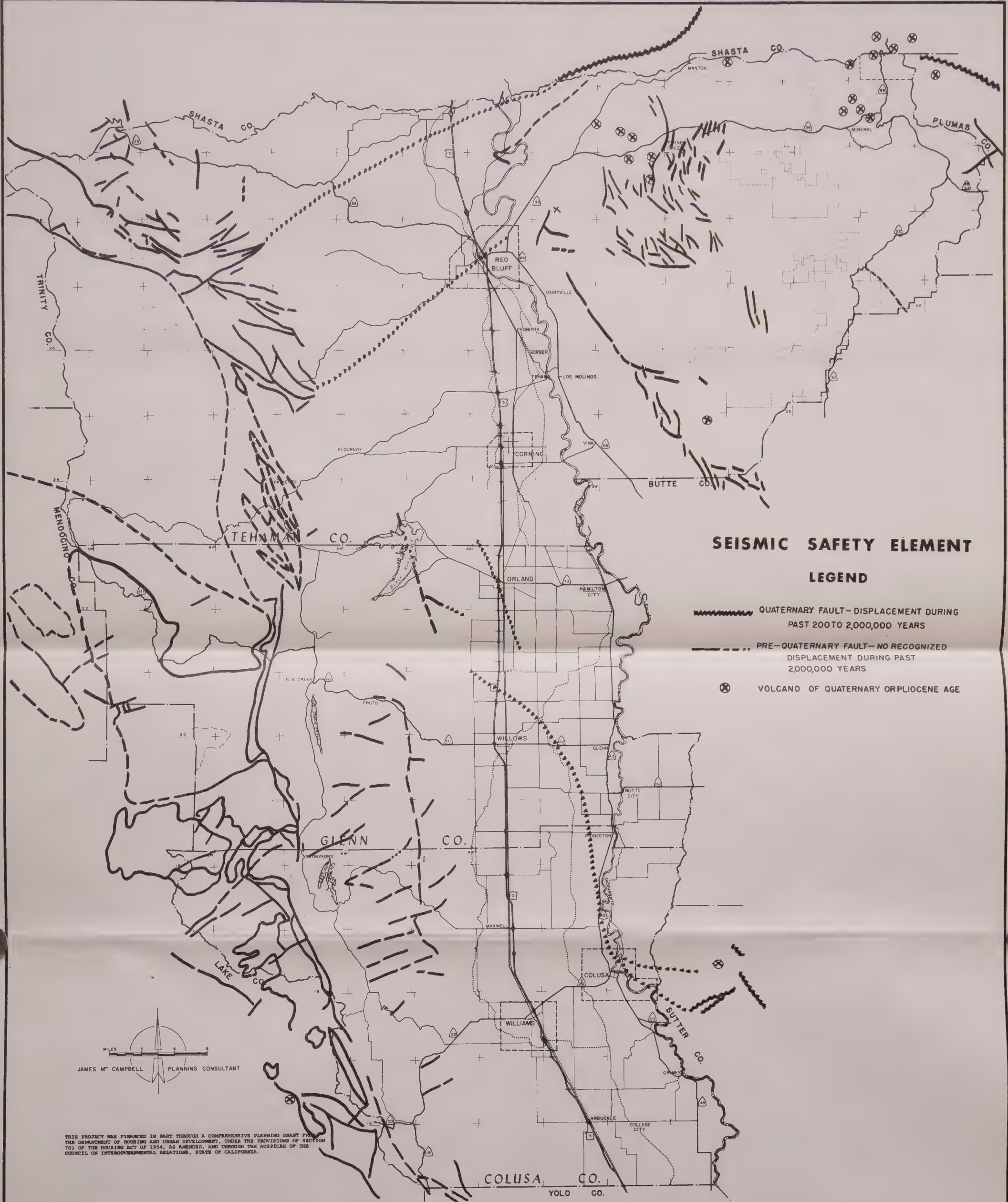
<u>Location</u>	<u>Date</u>	<u>Intensity</u>
California-Nevada Three shocks were felt at Marysville. Also felt at Stockton, Sacramento, Grass Valley, Mokelumne Hill, and Chico, California and at Virginia City, Nevada.	December 26, 1869	?
California-Nevada Considerable damage at Virginia City, Genoa, Carson City, Nevada. Damage also at Downieville and Oroville, California.	December 27, 1869	V-VII
Modesto Region Chimneys damaged in Modesto region. The shock was felt from Plumas County to Visalia.	April 10, 1881	VII
Lassen County Strongest near Janesville and on Susan River 12 miles from Susanville where chimneys fell.	January 30, 1885	VII
Nevada City Walls of courthouse cracked. Felt from San Francisco northeastward into Nevada.	April 28, 1885	VII
Lassen County The shock was felt to Chico and Sacramento, and possibly into Nevada.	June 19, 1889	VII
Near Bishop Strong shock. Felt in the region of Bishop and the Sierras to the westward. Heavy at Yosemite and Wawona.	September 29, 1889	?
Willows Reported felt from Sacramento to Greenville, and from Willows to Nevada City.	July 24, 1903	VII

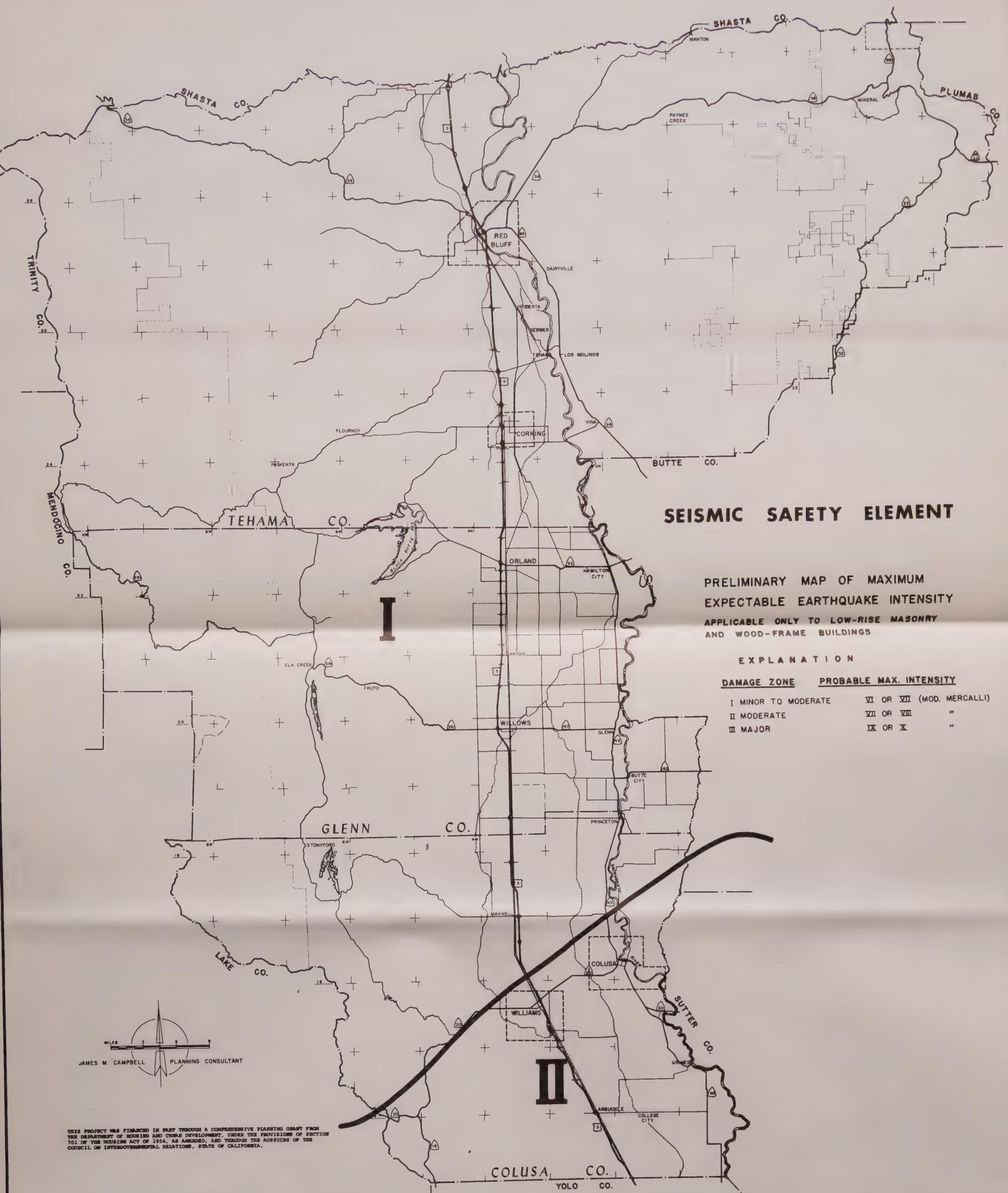
<u>Location</u>	<u>Date</u>	<u>Intensity</u>
Sierra County Bloomfield and at Bowmans Dam. Slight damage at Redding and Grass Valley. Also felt at Sacramento.	June 22, 1909	VII
Near Lassen Peak Highly localized shock in mountains near Whitmore, northwest of Lassen Peak. Considerable dislocation of ground.	February 21, 1915	VII
Northwest of Bishop Maximum intensity reported 15 miles northwest of Independence. The felt area included Stockton in California and Mina in Nevada.	November 28, 1929	VII
Lake Tahoe Chimneys damaged at south- east end of Lake Tahoe.	April 9, 1930	VI
North of Bishop Felt over an area of about 6,000 square miles of east- central California and Nevada. <u>Magnitude 5.5.</u>	April 10, 1936	VI
West of Bishop No structural damage reported as region was sparsely set- tled. <u>Magnitude 5.5.</u>	December 3, 1938	VI-VII
Northern California Damage in general was con- fined to Chico and Grass Valley. <u>Magnitude 6.</u>	February 8, 1940	VI-VII
Central California-Nevada Fairly hard series of hard shocks near Markleeville, Calif. <u>Magnitude 5.5.</u>	December 17, 1942	VI
Tulare County Intensity VI in Tulare County in and near the southern Sierra. <u>Magnitude 4.6.</u>	February 10, 1948	VI

<u>Location</u>	<u>Date</u>	<u>Intensity</u>
Lassen Peak Intensity V at 8 places. Also felt at Reno. <u>Magnitude 5.5.</u>	March 20, 1950	V
California-Nevada Border Felt over an area of approximately 3,000 square miles of northern California and western Nevada. <u>Magnitude 5.4.</u>	May 9, 1952	VI
Nevada-California Border Felt over an area of 12,000 square miles of western Nevada and northeastern California. <u>Magnitude 5.2.</u>	September 25, 1953	VI

NOTE:

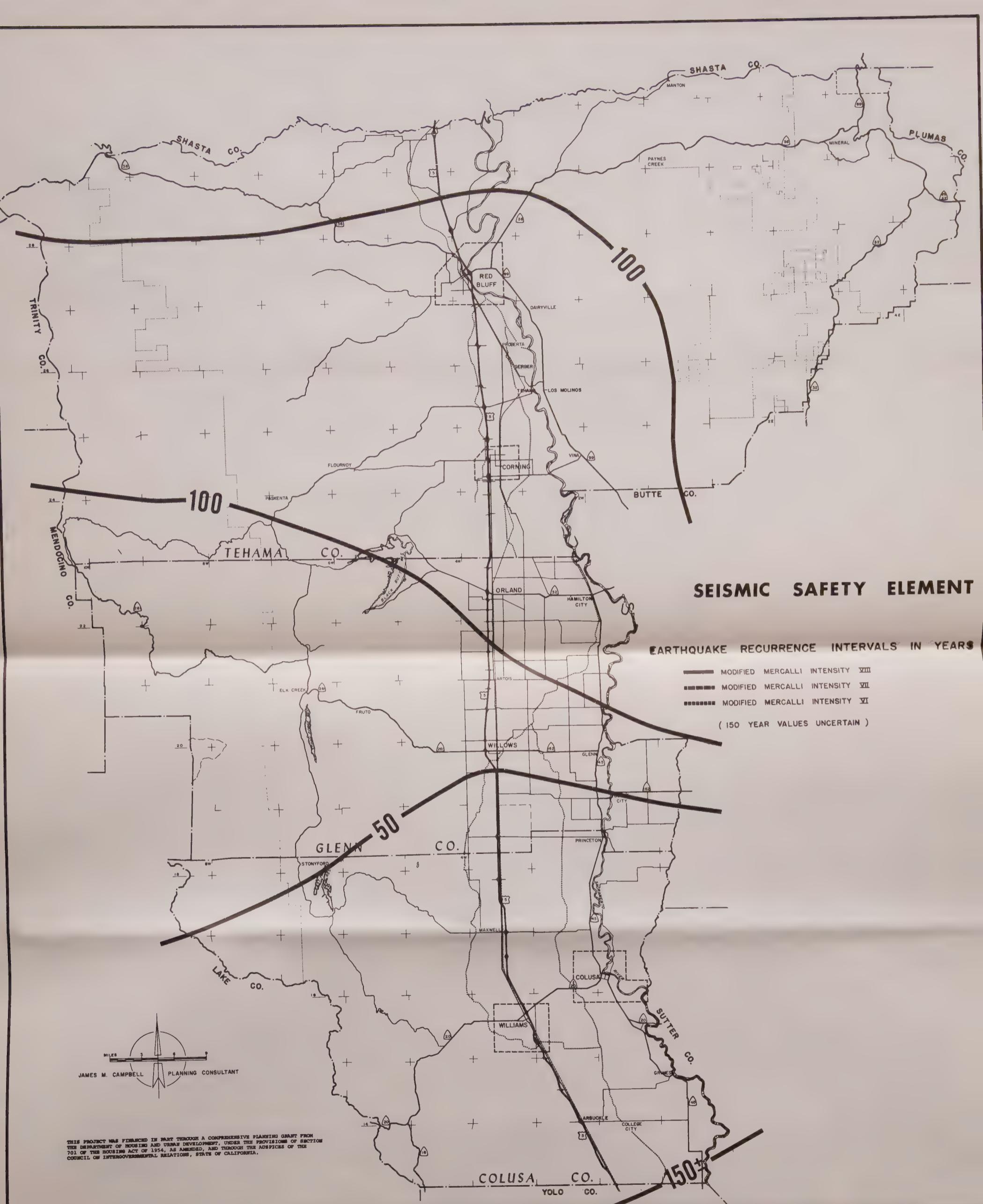
The foregoing listing of most major earthquakes of record in California and western Nevada are included herein to emphasize that during the past hundred years the planning area has experienced only minor earthquakes within the area and secondary impacts from earthquakes centered out of the area. Projections of future impacts are from low to moderate.

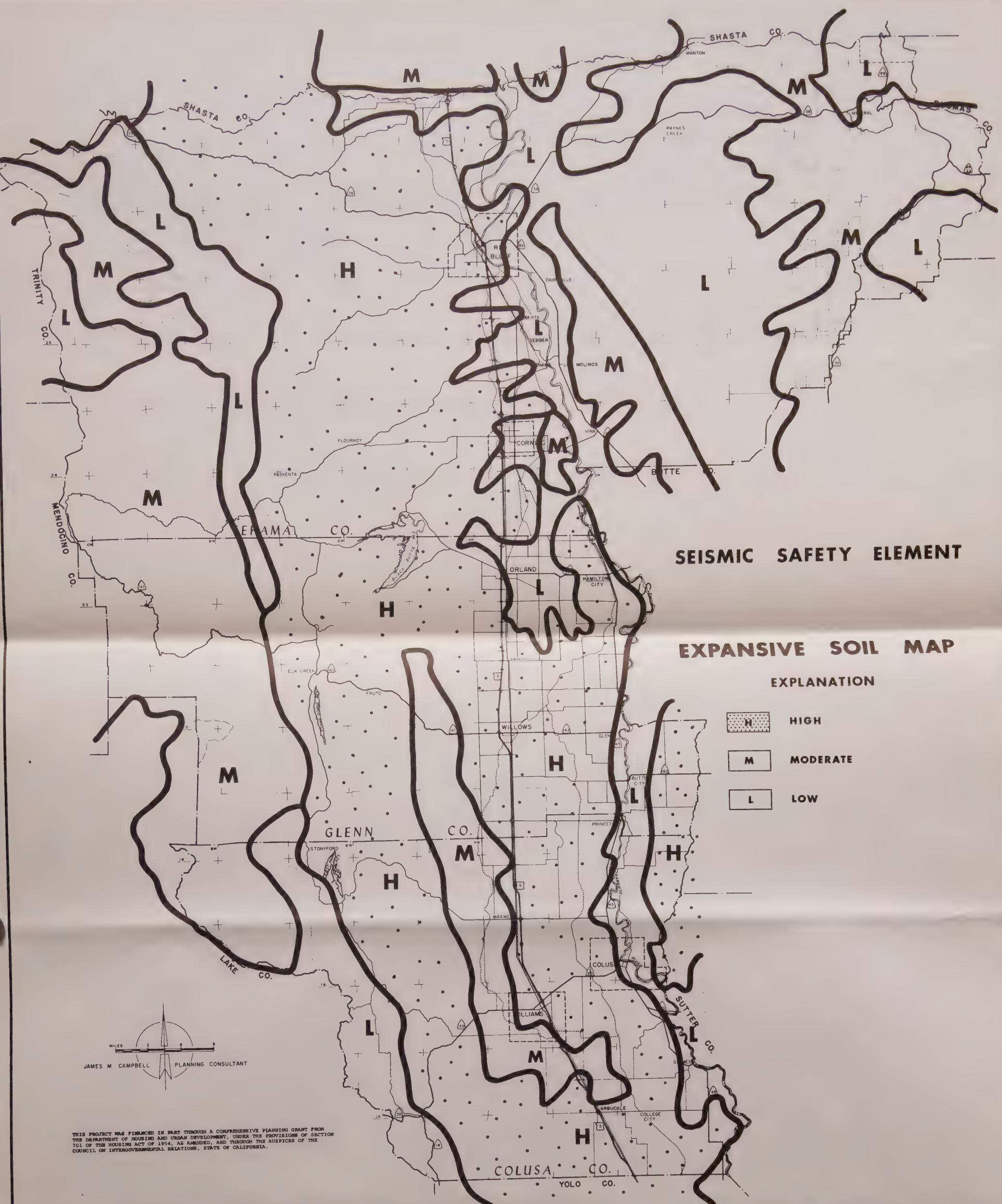


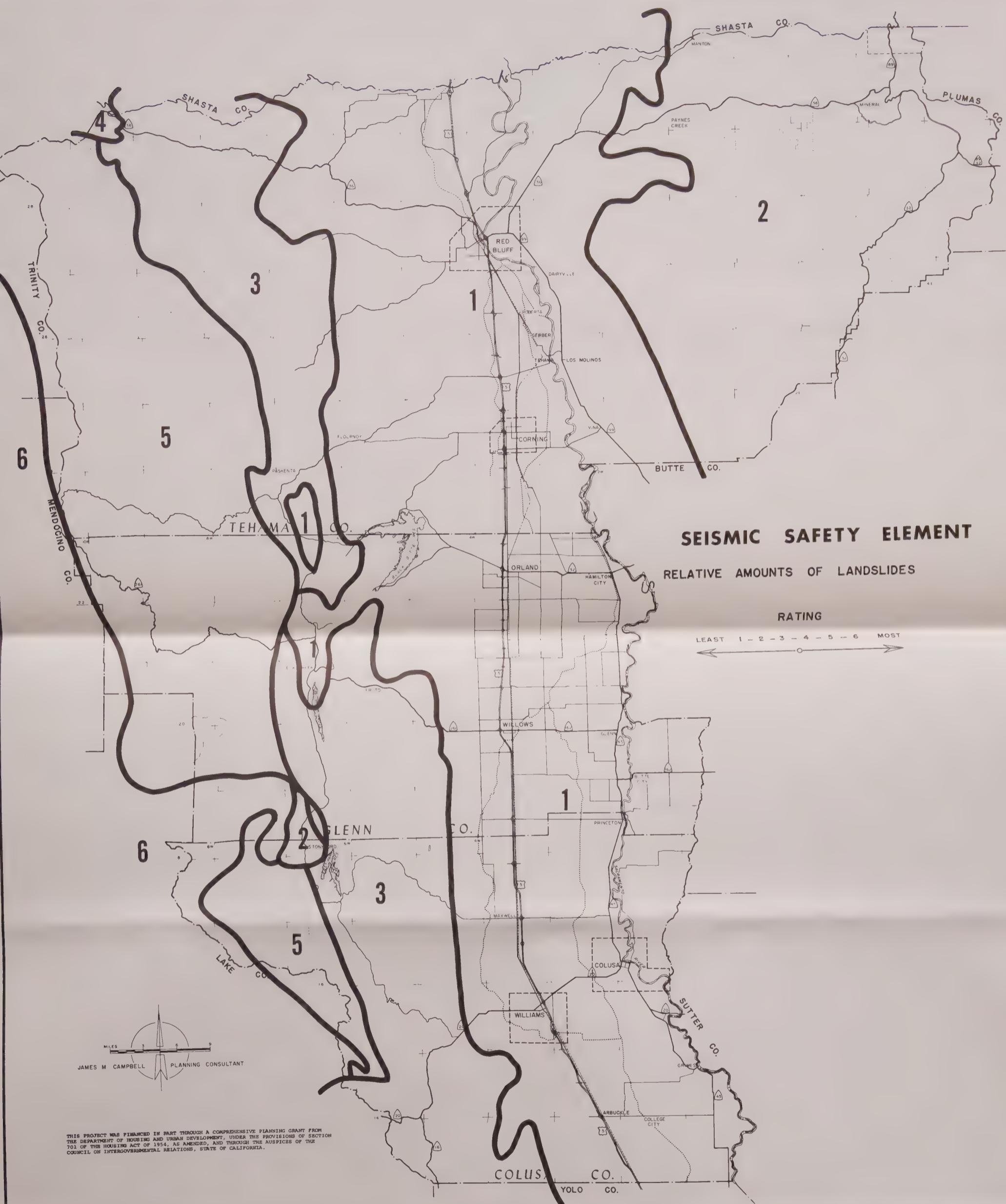


TRI-COUNTY PLANNING AREA

GENERAL PLAN

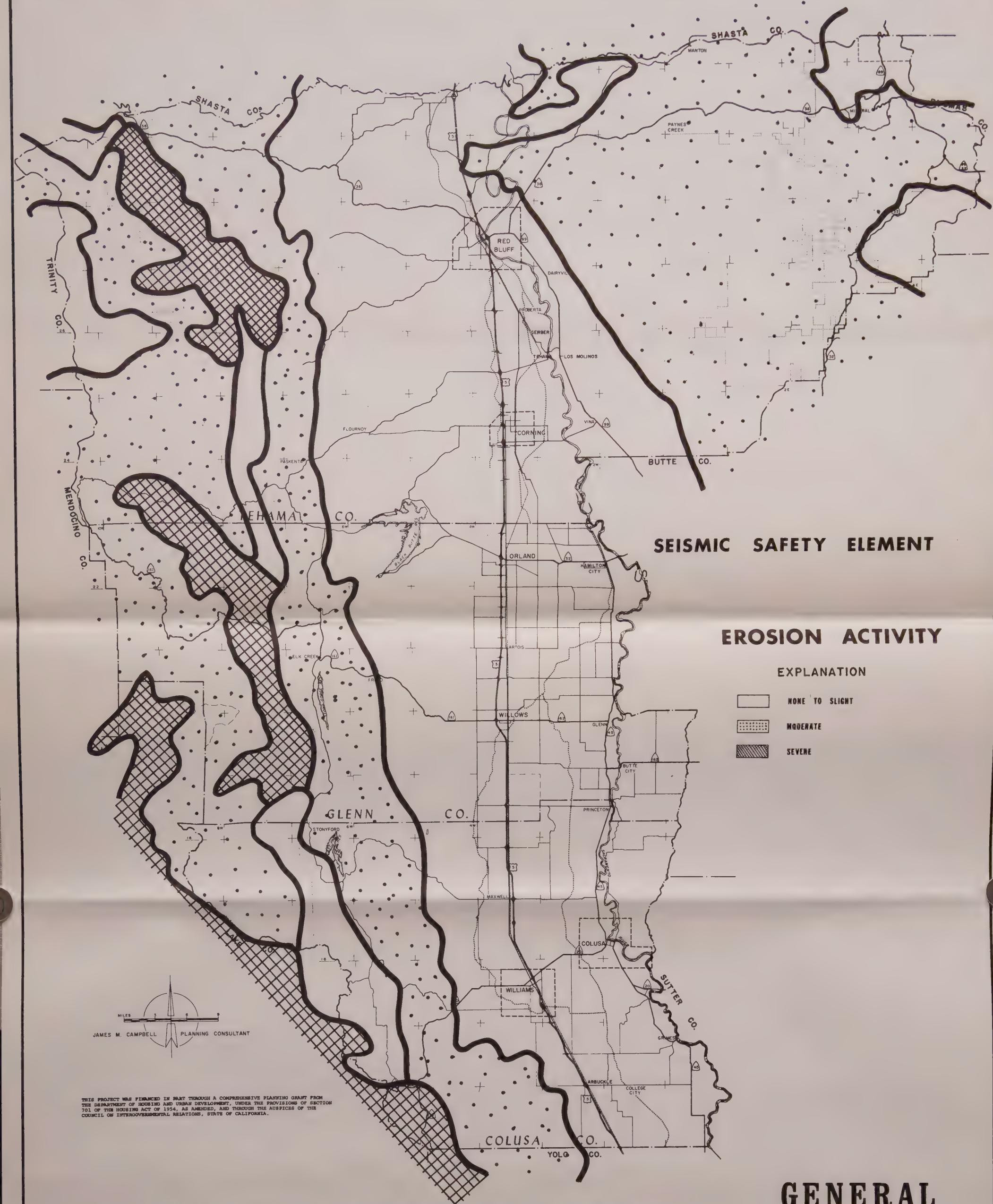






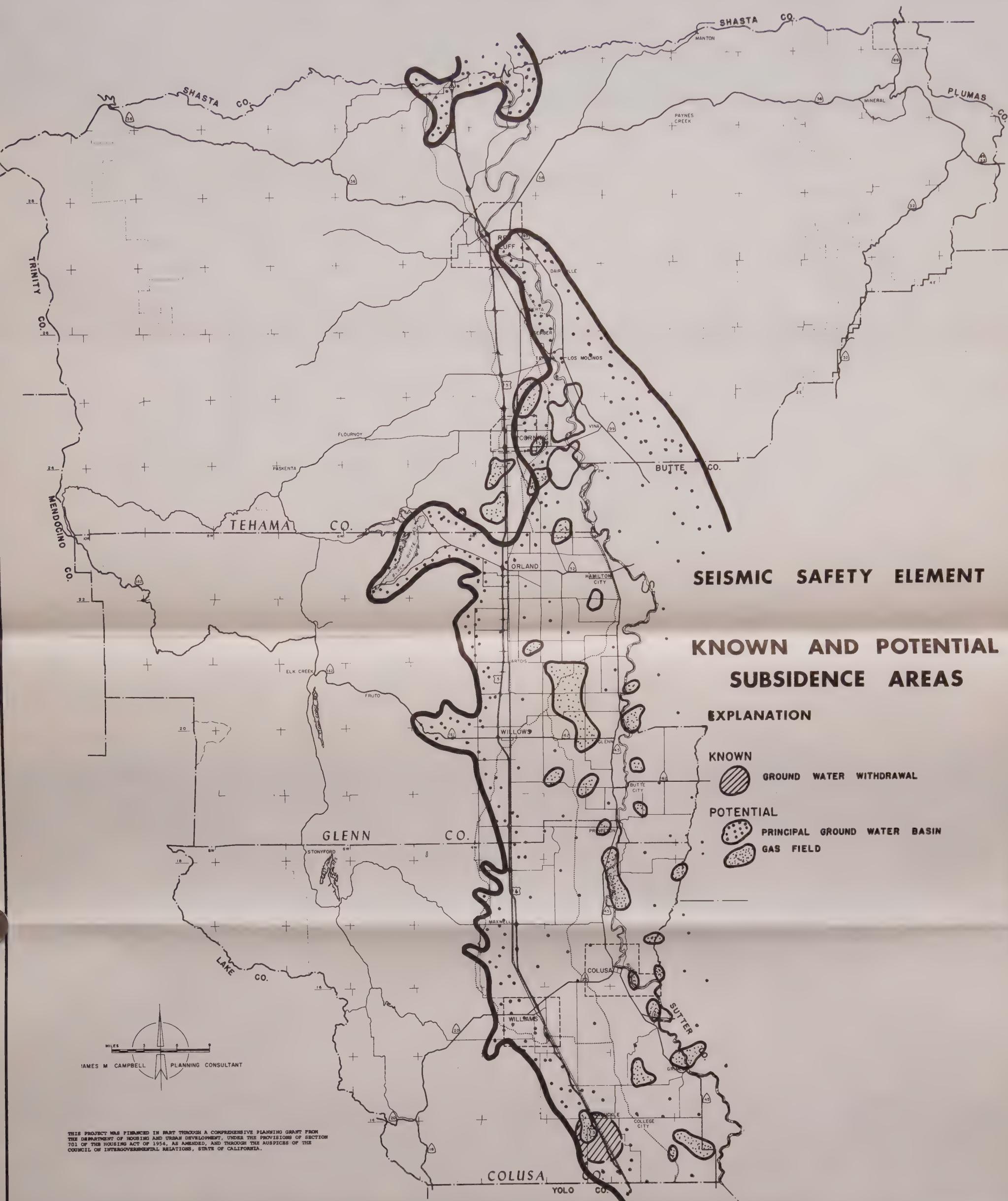
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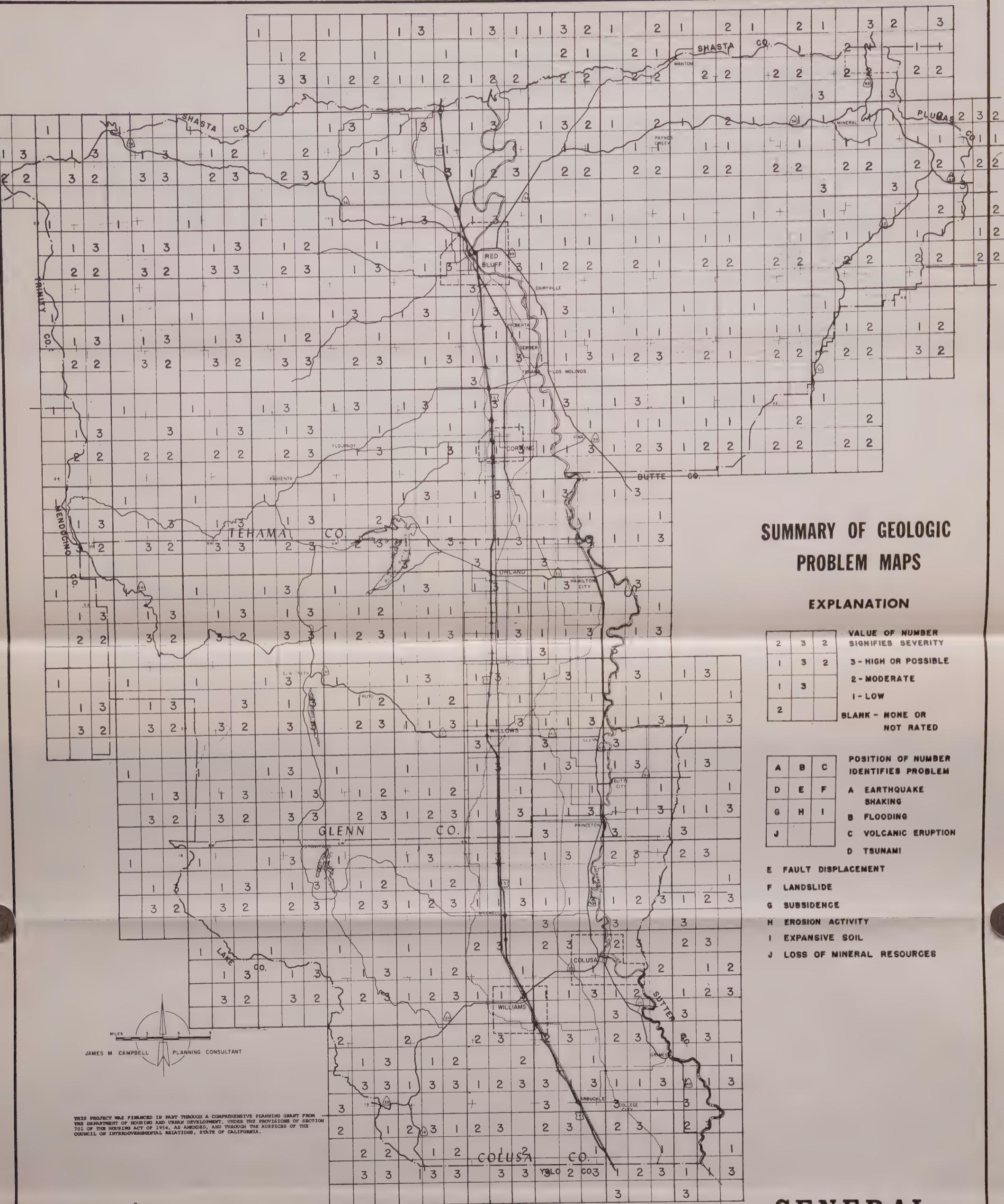
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GENERAL PLAN



TRI-COUNTY PLANNING AREA

**GENERAL
PLAN**



TRI-COUNTY PLANNING AREA

SUMMARY OF GEOLOGIC PROBLEM MAPS

III. METHODOLOGY

A. BASIC DATA

Both the U.S. Geological Survey and the California Division of Mines and Geology have produced and made available much updated and recent map and text information material to assist in the preparation of the Seismic Safety element, together with additional data useful for Safety, Conservation, Land Use and other elements. Most of the exhibits on preceding pages are reproductions of such basic data.

Additional basic data was assembled from State and local Emergency Services plans and programs, etc.

The identification, mapping and evaluation of existing and potential hazards, both as to severity and frequency of occurrence, based on such data, provided the basis for the Policy Statements and the Implementation Proposals contained herein.

B. ACCEPTABLE RISK

The acceptable risk, related to hazards, is described in the Policy Statements section as a generalized statement which is subject to local interpretation and revision in consideration of individual jurisdiction conditions, degrees of hazards, timing, etc.

C. CORRECTION, MITIGATION EFFORTS

Analysis of area hazards recognizes that hazards caused by nature, such as earthquakes, floods and wildfires, may not be eliminated or corrected, but that their effects may be mitigated substantially by planned protective measures as proposed in general terms herein. Hazards are relatively moderate in the

area, and most severe effects in small vulnerable locations may be reduced by progressive corrective actions.

Hazards created by people and their actions are not severe in the area. They may be substantially eliminated or corrected by appropriate actions of the individual jurisdictions and other involved agencies.

D. PROTECTIVE MEASURES

Data developed and analyzed in the preparation of the elements provided the basis for protective measures proposed in the Implementation section.

E. EXCHANGE of INFORMATION

The assembly of information from various agencies for the preparation of the elements established contacts of value, not only for this report, but for the ongoing process of area planning, coordination and effectuation of the Safety and Seismic Safety elements which will require the cooperative efforts of many individuals and agencies over an extended time period.

IV. RELATIONSHIPS OF THE SAFETY and SEISMIC SAFETY ELEMENTS

A. TO OTHER GENERAL PLAN ELEMENTS

Some of the more obvious natural and domestic hazards have been considered in the development of past General Plan elements, in zoning, in building and housing codes, and in the processing of land development projects, etc.

However, with a greater awareness of hazards and the probable impact of natural and other disturbances or disasters, and with factual information and this General Plan guide available, it is imperative that the Policy Standards and Implementation

Proposals contained herein be applied, as appropriate, to all other General Plan elements, to specific plans based hereon, be reflected in zoning and land division ordinances and pertinent codes, environmental impact statements and reports, plans for major public improvement projects, and generally throughout the total planning process.

B. TO OTHER FACTORS and AGENCIES

Used as above, these elements may be expected to contribute to reductions in social and economic costs resulting from loss of life, injury, and property damage.

These elements are also of value to various Federal and State agencies holding land ownerships and other interests in the planning area, for use in coordinated planning, land use regulations, and mutual assistance plans and programs.

V. IMPLEMENTATION PROPOSALS

A. OTHER GENERAL PLAN ELEMENTS

It is proposed that each member jurisdiction convert exhibit map and text data contained and/or referred to herein to individual planning area map form to show the nature and location of hazards or problems, including as appropriate seismic and other natural hazards, minerals and resources to be protected, evacuation routes, etc.

Such maps and explanatory data are to be considered as having General Plan status at or above that of other elements with which they are related.

B. CAPITAL IMPROVEMENT PROGRAMS

It is proposed that major public projects which are found to be necessary for the mitigation, correction or control of hazards or problems indicated in these elements be included with appropriate attention in the individual jurisdiction Capital Improvement Programs.

C. REGULATORY MEASURES, PROGRAMS, REVIEW

1. It is proposed that ordinances, codes, regulations and standards of local jurisdictions be reviewed and amended as may be necessary to effectuate the Safety and Seismic Safety elements proposals, and that new regulations be added as necessary for such purposes. This plan will be supplemented by a set of proposed sample ordinance provisions to assist member jurisdictions in the foregoing.

2. It is proposed that member jurisdictions and other area agencies initiate building and fire safety inspection programs to identify fire and structural hazards, and to correct them.

3. It is proposed that all local Emergency Operation Plans and programs be reviewed and updated to reflect hazards indicated herein, to include active programs for more effective operations in emergency or disaster situations, and to provide representation of fire, police and other emergency and protective agencies wherever safety factors are involved in the planning process.

4. It is proposed that these Safety and Seismic Safety elements, together with all related governmental safety planning programs, be reviewed, revised, and maintained at an active level aimed at effectuation of proposals in a vital ongoing planning operation.

5. It is proposed that review and updating processes of the Area Council and member jurisdictions include consideration of:

a. New seismic hazards data as may become available through further scheduled studies by the U.S. Geologic Survey and the State Division of Mines and Geology.

b. Detailed soil stability, landslide and mudslide locations, soil depth and permeability, moisture content, water table depth, and other such data from Soil Survey reports of the Soil Conservation Service and other such sources.

c. Progressive improvements in fire protection services, facilities and equipment per Board of Fire Underwriters and Fire Marshall standards; new sources of water supply, extended distribution, increased water pressure, additional equipment and personnel, etc.

d. Relationships, responsibilities, and mutual aid plans of Forest Service, Division of Forestry, Fire Districts and City Fire Departments.

e. Present and planned systems of evacuation routes, fire access trails and fire breaks, and of regulatory measures pertaining to seismic and fire safe construction, location and clearance around structures, etc.

f. Organization and effectiveness of local Emergency Operation Plans.

g. Review and updating of plans and programs for bank protection and erosion control along Sacramento River and tributaries.

NOTE: Pertinent environmental concerns and recommendations set forth in the document "Summary Report, Environmental Goals and Policy" (State of California) are reflected in this Safety and Seismic Safety element.

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AREA GENERAL PLAN - NOISE ELEMENT

I. INTRODUCTION

A. AUTHORITY

State law requires that City and County General Plans include a NOISE element which is described in the law as follows:

NOISE ELEMENT (Government Code Section 65302(g))

"A noise element in quantitative, numerical terms, showing contours of present and projected noise levels associated with all existing and proposed major transportation elements. These include but are not limited to the following:

- (1) Highways and freeways
- (2) Ground rapid transit systems
- (3) Ground facilities associated with all airports operating under a permit from the State Department of Aeronautics.

"These noise contours may be expressed in any standard acoustical scale which includes both the magnitude of noise and frequency of its occurrence. The recommended scale is sound level A, as measured with A-weighting network of a standard sound level meter, with corrections added for the time duration per event and the total number of events per 24-hour period.

"Noise contours shall be shown in minimum increments of five decibels and shall be continued down to 65 db(A). For regions involving hospitals, rest homes, long-term medical or mental care, or outdoor recreational areas, the contours shall be continued down to 45 db(A).

"Conclusions regarding appropriate site or route selection alternatives or noise impact upon compatible land uses shall be included in the general plan.

"The state, local, or private agency responsible for the construction or maintenance of such transportation facilities shall provide to the local agency producing the general plan, a statement of the present and projected noise levels of the facility, and any information that was used in the development of such levels."

II. SCOPE and NATURE of the NOISE ELEMENT

A. PLANNING AREA, GENERAL POLICY

In the planning area of approximately 5,000 square miles, with a population density of about ten persons per square mile, and with most of its extensive mountain area in substantially unpopulated and undeveloped Federal land ownership, noise is a minor problem with respect to the total area.

General policy is to locate particular present or potential problem sites, identify noise sources, and provide for the reduction and/or reasonable control of noise through this plan element, precise plans based hereon, and appropriate regulatory measures to effectuate the proposals contained herein.

1. Noise in the Area

Noise at or approaching problem magnitudes in the area is concentrated in the urban areas, at certain industrial operations, and along the corridors of transportation routes, air, rail and highway.

Urban and industrial noises and their sources are considered as a local noise problem subject to local attention, and related to but somewhat distinct from transportation noise, the control of which involves a number of Federal, State and local agencies.

It is plan policy to recognize and treat both fields of noise problems, each in a manner and to a degree considered reasonable and adequate for the best interests of the area and the comfort and convenience of its people.

2. Policy Regarding Needed Controls

Urban and industrial noise problems are generated by people and their local activities, in their use of land and equipment, and in their business and industrial operations.

Control of such noises and their sources is most effectively applied, as and when needed, by local City or County ordinances which include enforcement provisions which specify maximum permissible noise levels in relation to established ambient levels.

A sample ordinance is included herein.

Controls of noises from transportation equipment and facilities, such as motor vehicles, railroad trains and aircraft, and their highways, tracks and airways, are almost entirely in the legal jurisdiction of Federal and State agencies.

The preparation of this Noise element was assisted by such agencies, and controls and preventive measures applied by or available through such agencies are incorporated herein.

B. DESIRED MAXIMUM LEVELS in LAND USE AREAS

The intensity of sound, or noise, as detectable by the human ear, is measured in "Decibel" units. For purposes of this element, the A-weighted decible unit, dB(A), as registered on commercial sound level meters, is used in relation to surface noises.

1. Highway Design Standards. The following is a summary of Federal standards for use in the design of roads and highways which are applicable with minor variations in California, and which are proposed element guides. (Ref: U.S. DOT PPM 90-2, Feb. 8, 1973, Appendix B-4).

Land Use Category	Design Noise Level - L ₁₀
A. Unique and unusual tracts of land in which serenity and quiet are of extraordinary significance and preservation of those qualities is essential if the area is to continue to serve its intended purpose.	60 dB(A) (Exterior)
B. Residential areas, schools, churches, libraries hospitals, and so forth.	70 dB(A) (Exterior)
C. Other developed land not included in (A) and (B) and generally constituted by urbanized business or industrialized areas.	75 dB(A) (Exterior)
D. Special condition sites, areas, or activities. The design noise level should be established, based on the merit of the specific case and an analysis of the acceptable level.	(Exterior or Interior)

2. Land Use Classification Standards. The following standards are proposed as generally desirable ambient exterior noise level guides to be used together with other basic plan elements and in the future planning and location of noise-sensitive land uses and developments in relation to noise generating uses and facilities.

Land Use Classification	Desired Ambient Level, dB(A)
Residential, rural-suburban:	10 PM to 7 AM 7 AM to 10 PM 40 - 45 45 - 50 - 60*
Residential, suburban:	10 PM to 7 AM 7 AM to 10 PM 45 - 50 50 - 55 - 65*
Residential, low density urban:	10 PM to 7 AM 7 AM to 10 PM 50 - 55 55 - 60 - 70*
Residential, med./high density:	10 PM to 7 AM 7 AM to 10 PM 55 - 60 60 - 65 - 70*
Commercial zones, districts:	10 PM to 7 AM 7 AM to 10 PM 65 - 70 70 - 75
Industrial zones, districts:	24 hours 75

*Proposed where transportation noise is a significant factor.

NOTE: It is expected that some periodic peak noises from various agricultural and forestry operations which are common and established operations within the area may exceed the above desired ambient levels.

The above standards are intended to be applied with careful attention to the particular City or County area conditions, such as size and nature of development and expansion area, mixture of uses and spacing of mixed uses, present ambient levels, etc.

The following are summarized noise level standards established by the Department of Housing and Urban Development for residential mortgaging estimates, construction projects and new housing.

<u>General External Exposure, dB(A)</u>	<u>*NEF ZONES, Airport Environs</u>
1. <u>Unacceptable:</u>	
a. Exceeds <u>80</u> , 60 min. per 24 hours.	Greater than <u>40*</u>
b. Exceeds <u>75</u> , 8 hours per 24 hours.	
2. <u>Discretionary</u> , Normally Unacceptable:	
a. Exceeds <u>65</u> , 8 hours per 24 hours.	Between <u>30*</u> & <u>40*</u>
b. Loud repetitive sounds on site.	
3. <u>Discretionary</u> , Normally Acceptable:	
a. Does not exceed <u>65</u> more than 8 hours per 24 hours.	Less than <u>30*</u>
4. <u>Acceptable:</u>	
a. Does not exceed <u>45</u> more than 30 minutes per 24 hours.	Less than <u>30*</u>

Because the foregoing HUD standards also apply to FHA financing of residential housing, they must be given particular attention and be related closely to the preceding land use classification standards if and when a local jurisdiction considers application of non-transportation noise regulations.

C. STANDARDS, NOISE FROM TRANSPORTATION FACILITIES

The State law definition of the Noise element mentions only, and so gives primary importance, to noise generated by transportation facilities, (See page 31, Authority):

*NEF = "Noise Exposure Forecast", HUD Noise Assessment Guidelines.

- "(1) Highways and Freeways,
- "(2) Ground rapid transit systems,
- "(3) Ground facilities associated with all airports operating under permit from the State Department of Aeronautics."

Since ground rapid transit systems do not exist in the planning area except in the mild form of limited bus operations on public roads and highways, and since area airports are general aviation operations not used for scheduled airline purposes or for large commercial jet engine aircraft, this Noise element plan directs primary attention to highway and freeway noise problems. Although railroads are not specifically mentioned in the law, they are recognized as contributors to noise problems in the area.

Control of noise related to motor vehicles, aircraft, and railroad equipment is under the jurisdiction of Federal and State agencies. For this reason this plan element is designed to present information useful for planning purposes rather than to propose specific local control standards for transportation facilities.

Under the State law, the agencies responsible for the construction and maintenance of major transportation facilities are obligated to provide present and projected noise levels for their facilities. Therefor, in this planning area, the State Department of Transportation is the major contributor of such information.

1. Standards for Basic Information

Two recognized methods for presenting the present and projected noise level information are available from the California Department of Transportation, Division of Highways:

a. "Test Method No. Calif. 701-A", mean truck noise levels for diesel trucks.

b. "L₁₀ Method", the sound level that is exceeded ten percent of the time (the 10th percentile) for the period under consideration. This value is an indicator of both the magnitude and frequency of occurrence of the loudest noise events.

Both the U.S. Department of Transportation and the U.S. Department of Housing and Urban Development accept the L₁₀ Method, rather than the California Method. The Department of Transportation has provided L₁₀ Method data for 1974 and projected 1995 noise contour mapping of urban areas, together with section drawings from which to apply Calif. 701-A Method data along low traffic volume rural routes on an interim basis.

c. Government Code Sec. 65302(g) Standards

<u>Data Sources</u>	<u>dB(A) Map Contours</u>
From L ₁₀ data, meter readings, (or California Method charts, etc.):	
1. Freeways and Highways	Down to <u>65</u>
2. At hospitals, rest homes, long-term . . . medical or mental care, or outdoor recreation areas (as appropriate)	Down to <u>45</u>

d. Airport Ground Facilities and Aircraft.

The following noise level standard is proposed as a goal for existing airports and a control for future airports where residential or hospital, etc. uses as above are located adjacent to, or in close proximity to the airport boundaries.

<u>Location of Sound Level Reading</u>	<u>*CNEL Reading</u>
At airport boundary adjacent to residential, etc. use areas.	65 dB(A)

*CNEL = "Community Noise Equivalent Level", in decibels, represents the average daytime noise level during a 24 hour day, adjusted to an equivalent level to account for the lower tolerance of people to noise during evening and night-time periods relative to daytime periods.

III. GENERAL POLICY STATEMENTS re. STANDARDS, GOALS

This Noise element is designed to provide a guide for local jurisdictions to use in relation to their particular needs and conditions. It is adaptable for adoption in this form as the broad General Plan element, and may be revised or supplemented as particular needs dictate.

Standards contained herein are derived from State and Federal agency sources, and in most cases were developed specifically for such General Plan and related purposes.

Goals of the plan element are to provide the general guide and sufficient detail to identify noise problems, present basic standards for their reduction and/or control, and indicate methods to effectuate such controls.

The element and its effective application in the planning area has value in that it may produce a more pleasant "people" environment through reduction and control of noise pollution which has been proven to have, at certain levels, adverse effects upon the physical and mental well-being of persons subjected to such pollution.

IV. RELATIONSHIPS of the NOISE ELEMENT

A. TO OTHER GENERAL PLAN ELEMENTS

There is a strong relationship between the Noise element and the Land Use element and its urban and suburban land use classification areas, the Housing element with respect to Federal standards for acceptable noise levels for residential construction financing, and the Circulation element with respect to desired transportation facility noise levels.

The noise element is in a sense a supplementary element to the above in that its standards and proposals are to be superimposed upon, or incorporated with those of the other element plans.

It has particular value in its use with respect to the location and design of future transportation facilities, and in the location of future housing developments, hospitals, etc. in relation to transportation facilities and other primary noise generators.

B. TO ENVIRONMENTAL IMPACT

Standards and goals of this plan element will have reference value in the assessment of noise impact upon the environment which may result from most proposed public and private projects.

C. TO OTHER AGENCIES

The cooperative approach of the total multi-county planning project of the Area Council has involved many Federal, State and local agencies in the preparation of this Noise element and other General Plan elements undertaken by the Council.

All such agencies are concerned with noise problems in their particular fields of planning, and are encouraged to utilize appropriate goals and standards contained herein for purposes of area uniformity and close planning coordination.

V. IMPLEMENTATION PROPOSALS

A. NOISE ELEMENT re. TOTAL GENERAL PLAN

As indicated in preceding part IV. hereof, the Noise element relates closely to, and may be implemented through application of its standards and goals to other General Plan elements.

Although State law mandates a fractured total listing of General Plan elements with forced duplications, etc., local refinement and reasonable administration will permit orderly transmittal of goals and standards from plan to plan for effective implementation.

All such elements require periodic review which may include better organization of plan features based on use and experience.

B. REGULATORY MEASURES

The Noise element contains both proposed standards for future facility and development location and design, and for specific controls which are proposed to be applied by law - Federal, State or local ordinance.

Since, as has been mentioned, noise controls of transportation facilities are in Federal and State jurisdiction, only the controls of noise related to urban land uses and operations and commercial and industrial operations are subject to local ordinance control.

Needs for such regulation will be greatest in City and urban areas, and the degree of need and timing for application of controls is a matter of local jurisdiction determination.

A sample ordinance designed for such purpose is included as "Exhibit B" hereof. Although the sample is drafted as a City ordinance, it is adaptable for County use also.

C. ADDITIONAL IMPLEMENTATION MEASURES

Although it is recognized that correction or reduction of existing noise problems is difficult, some relief may be expected through stricter Federal and State standards applied to motor

vehicles, aircraft and railroad equipment. Sound barriers may be installed along serious problem sections of freeways and highways, industries may install sound control equipment, exterior wall and mass planting, and interior soundproofing may be installed to reduce noise in existing structures.

The more effective long-range implementation measures will be, through use of standards and controls proposed herein, and the use of the charts, maps, etc. which constitute "EXHIBIT A" hereof, to consider carefully the noise factor in the design and location of future transportation and other noise generating facilities with respect to noise sensitive land uses.

Conversely, housing and hospital, etc. types of land uses should be located and designed in the future with careful consideration of present and projected noise levels of present or future high level noise generating facilities.

The "EXHIBIT A" maps are to be considered as basic information having value for present purposes. They should be supplemented by more detailed and updated "on-site" sound level readings and analysis of future noise generator projections in the area, particularly at the time site locations for housing developments, hospitals, schools, health care facilities, places of public assembly, recreation facilities, etc. are being selected.

Ambient sound level readings will be required to be taken and recorded in conjunction with implementation of controls by use of local sound control ordinances, "Exhibit B".

NOISE CHARTS and DIAGRAMS

The following charts and diagrams are intended to give a general understanding of noise and its levels of magnitude and effect, as heard by the human ear.

Some of the charts and diagrams are informational, and some are intended for use in relation to policies, standards, and controls of present and projected noise problems as set forth in this plan element.

They should be used with the understanding that they present generalized information in some cases, and some may require supplementary data for reliable results.

<u>EXHIBIT</u>	<u>TITLE</u>
A-1	COMMON INDOOR AND OUTDOOR NOISE LEVELS Source: "Guide On Evaluation And Attenuation Of Traffic Noise", Author and Publisher: American Assoc. of Highway and Transportation Officials.
A-2	CUMULATIVE DISTRIBUTION OF HIGHWAY VEHICLES VERSUS NOISE LEVELS. Source: "Transportation Noise And Its Controls", U.S. Department of Transportation.
A-3	MEDIAN NOISE LEVEL ESTIMATES OF MIXED TRAFFIC AT 50 MILES PER HOUR. Source: Same as A-2.
A-4	NOISE REDUCTION PRODUCED BY VARIOUS HIGHWAY CONFIGURATIONS. Source: Same as A-2.
A-5	NOISE REDUCTION WITH AND WITHOUT TREES. Source: Same as A-2.
A-6	WAYSIDE NOISE LEVEL FOR TRANSIT TRAINS OF VARIOUS LENGTHS. Source: Same as A-2.
A-7	ESTIMATED LOCATION OF <u>CNEL</u> = 70 dB CONTOURS FOR TYPICAL GENERAL AVIATION AIRPORTS. Source: California Department of Aeronautics, per, "TITLE 4, (Register 70, No. 48-11/28/70)".

<u>EXHIBIT</u>	<u>TITLE</u>
A-8	TYPICAL TRUCK NOISES VERSUS DISTANCE FROM THREE BASIC FREEWAY DESIGNS.
A-9	<p>Source: "Methods For Measuring Noise Levels", California Department of Transportation.</p> <p><u>NOTE:</u> Exhibit A-9, included herein <u>by reference</u>, consists of L_{10} Method Highway Noise Contour strip maps and related data prepared and contributed to the noise element plan program by the California Department of Transportation.</p>

The L_{10} method maps and data provide the most authentic and useful information for plan element use along freeway and major highway corridors.

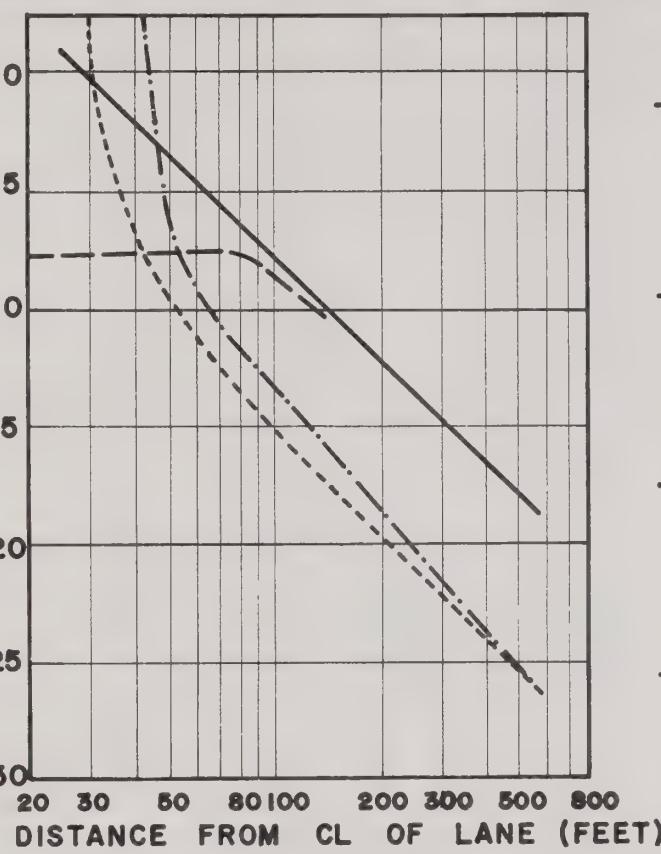
<u>COMMON OUTDOOR NOISE LEVELS</u>	<u>NOISE LEVEL dB(A)</u>	<u>COMMON INDOOR NOISE LEVELS</u>
	-110	--- Rock Band
Jet Flyover at 1000 ft.	-----	-
	-	-
	-100	----- Inside Subway Train
Gas Lawn Mower at 3 ft.	-----	(New York)
	-	-
	-90	-----
Diesel Truck at 50 ft.	-----	Food Blender at 3 ft.
	-	-
	-	-
Noisy Urban Daytime	-----	-80
	-	--- Garbage Disposal at 3 ft.
	-	Shouting at 3 ft.
	-	-
	-	-
Gas Lawn Mower at 100 ft.	-----	-70
	-	--- Vacuum Cleaner at 10 ft.
	-	-
	-	-
Commercial Area	-----	-60
	-	----- Normal Speech at 3 ft.
	-	----- Large Business Office
	-	-
	-	-
Quiet Urban Daytime	-----	-50
	-	--- Dishwasher Next Room
	-	-
	-	-
	-	-
Quiet Urban Nighttime	-----	-40
	-	--- Small Theatre, Large
	-	Conference Room (Background)
	-	-
Quiet Suburban Nighttime	-----	-30
	-	----- Library
	-	----- Bedroom at Night
	-	-
Quiet Rural Nighttime	-----	-20
	-	----- Concert Hall (Background)
	-	----- Broadcast & Recording Studio
	-	-
	-	-
	-	-10
	-	----- Threshold of Hearing
	-	-
	-	-0

Source: "Guide on Evaluation and Attenuation of Traffic Noise",
 Author and Publisher: American Association of State Highway and
 Transportation Officials.

NOTE: A ten (10) decibel increase in sound level on dB(A) scale
 doubles the apparent loudness or annoyance of the sound.

NOISE REDUCTION PRODUCED BY
VARIOUS HIGHWAY CONFIGURATIONS

RELATIVE A-WEIGHTED SOUND LEVEL



EXHIBITS A-4, 5, 6

ON GRADE



ELEVATED



VERTICAL CUT



SLOPED CUT

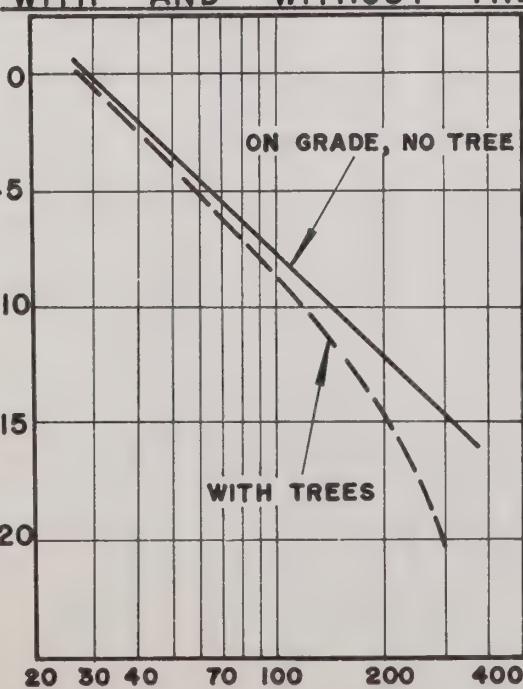


A - 4

A - 5
NOISE REDUCTION

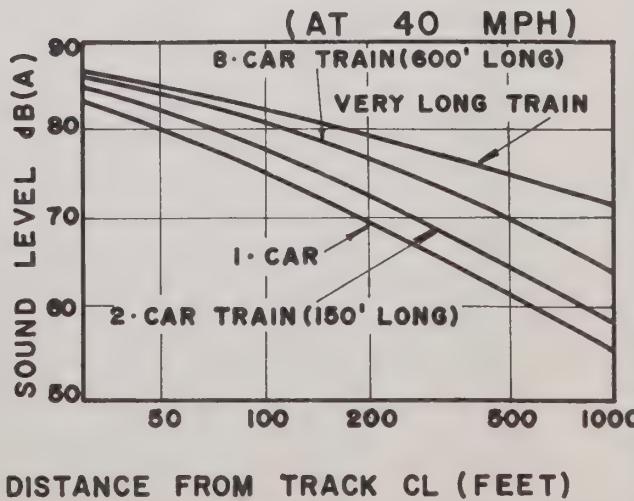
RELATIVE A-WEIGHTED SOUND LEVEL

WITH AND WITHOUT TREES



A - 6

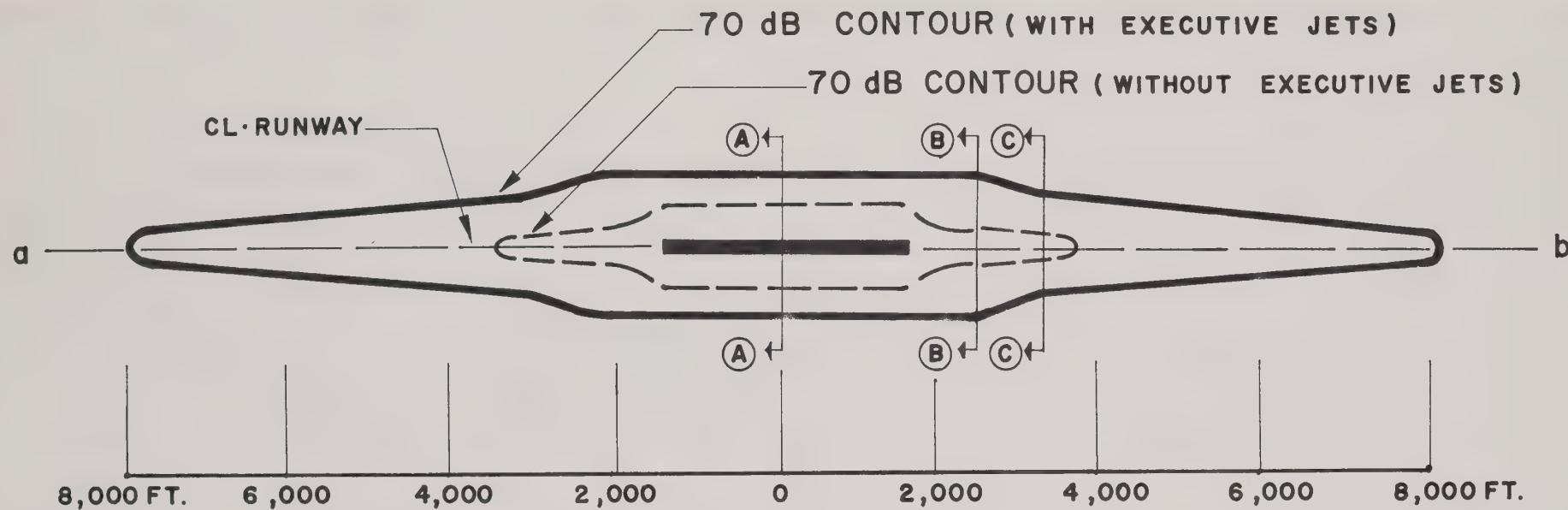
WAYSIDE NOISE LEVEL FOR
TRANSIT TRAINS OF VARIOUS
LENGTHS



DISTANCE FROM CL OF LANE (FEET)

DISTANCE FROM TRACK CL (FEET)

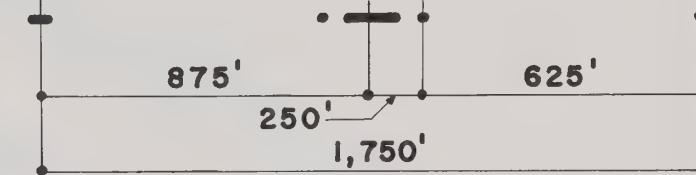
ESTIMATED LOCATION OF CNEL=70 dB CONTOURS FOR TYPICAL GENERAL AVIATION AIRPORT



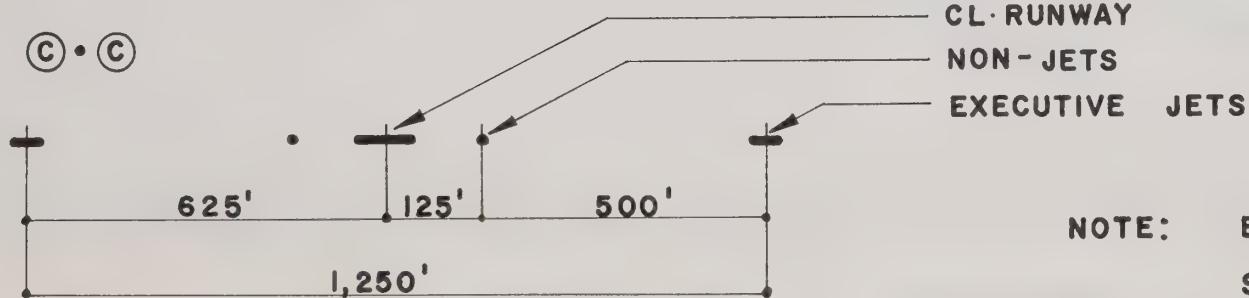
(A) • (A)



(B) • (B)



(C) • (C)

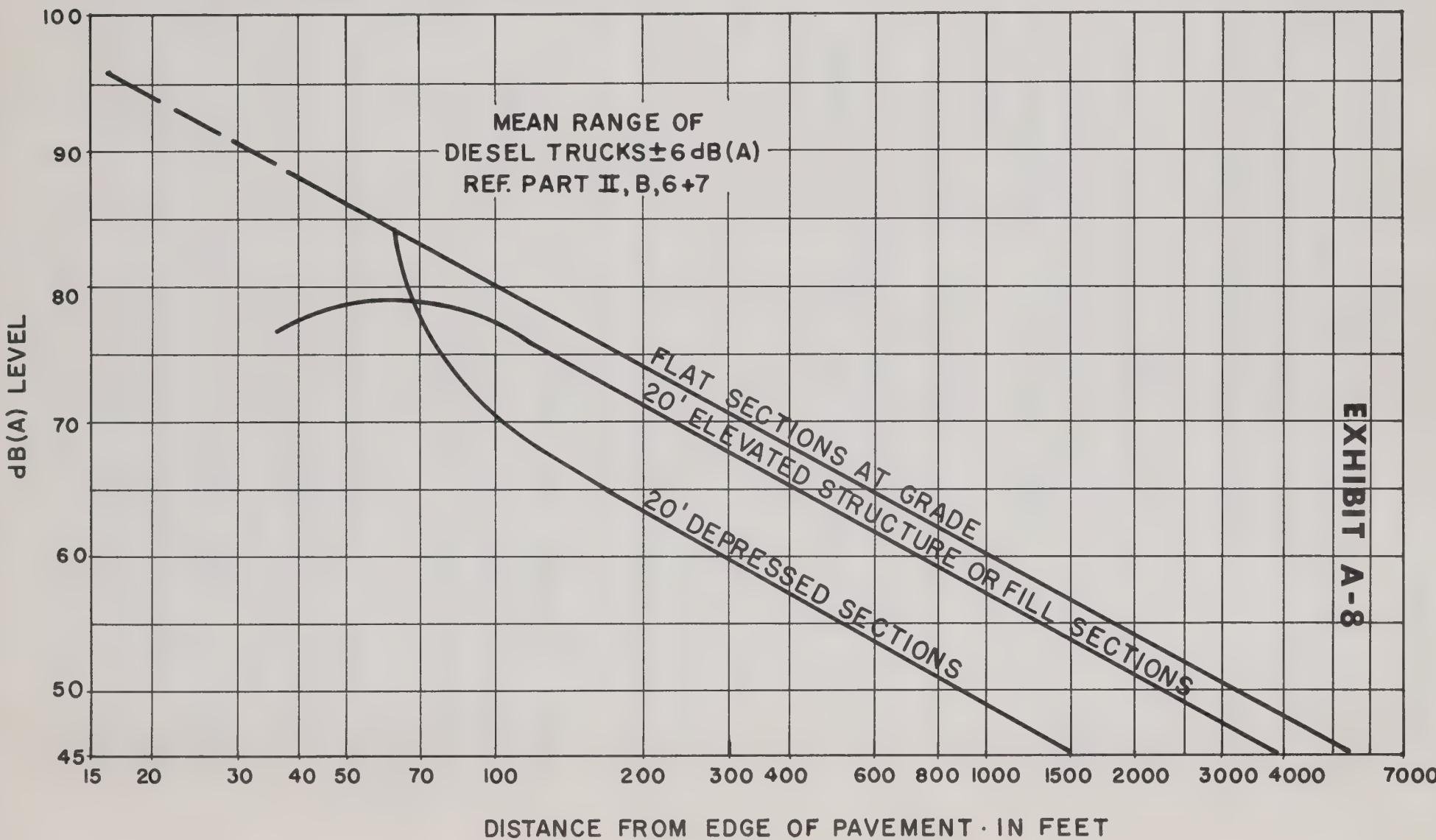


NOTE: ESTIMATE ONLY, DISTANCES SHOWN ARE APPROXIMATE.

TYPICAL TRUCK NOISE VERSUS DISTANCE FROM 3 BASIC FREEWAY DESIGNS

MICROPHONE 5 FEET ABOVE GROUND

(TEST METHOD NO. CALIF. 701-A OCT. 4, 1971)



MODEL NOISE ORDINANCE

The model noise ordinance which follows in modified form, as Exhibit B, was prepared by the League of California Cities to serve as a general guide as to the nature and content of such ordinances.

It is intended for reference purposes for any City which might in the future find that noise of the limited types subject to local control appears to be at or approaching intolerable levels in some areas.

Any such ordinance should be further modified to relate directly to the particular city conditions and to established and recorded ambient sound levels within the various land use areas of the city.

Although few of the smaller cities in California have found need for noise control ordinances, other models may be obtained from larger cities which may have developed and adopted such ordinances for their particular situations.

The Pacific Gas and Electric Company has prepared a suggested form of ordinance which contains community sound levels which are the same as those proposed in this General Plan element on page 4 hereof.

The P.G. & E. ordinance proposes noise levels five decibels higher than those shown in the League of Cities model, and as shown on page B-3. Both the League of Cities model and the references to P.G. & E. proposals are included herein for general informational purposes only. They do not constitute General Plan standards or proposals.

MODIFIED

Model Noise Ordinance-League of California Cities

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF _____ ADDING
CHAPTER _____ TO TITLE _____ OF THE
MUNICIPAL CODE PROHIBITING EMISSION OR CREATION OF
NOISE BEYOND CERTAIN LEVELS.

THE CITY COUNCIL OF THE CITY OF _____ DOES ORDAIN
AS FOLLOWS:

Chapter _____ consisting of _____ articles and entitled "NOISE
REGULATIONS" is added to the _____ Municipal Code to read as follows:

CHAPTER _____. NOISE REGULATION

Article 1. General Provisions

Sec. ____ Declaration of Policy.

It is hereby declared to be the policy of the City to prohibit unnecessary, excessive, and annoying noises from all sources subject to its police power. At certain levels noises are detrimental to the health and welfare of the citizenry and in the public interests shall be systematically proscribed.

Sec. ____ Definitions.

As used in this chapter, unless the context otherwise clearly indicates, the words and phrases used in this chapter are defined as follows:

(a) Ambient Noise. "Ambient noise" is the all-encompassing noise associated with a given environment, being usually a composit of sounds from many sources near and far. For the purpose of this ordinance, ambient noise level is the level obtained when the noise level is averaged over a period of 15 minutes without inclusion of noise from isolated identifiable sources, at the location and time of day near that at which a comparison is to be made.

(b) Decibel. "Decibel" (dB) shall mean a unit of level which denotes the ratio between two (2) quantities which are proportional to power; the number of decibels corresponding to the ratio of two (2) amounts of power is ten (10) times the logarithm to the base ten (10) of this ratio.

(c) Emergency Work. "Emergency work" shall mean work made necessary to restore property to a safe condition following a public calamity or work required to protect persons or property from an imminent exposure to danger or work by private or public utilities when restoring utility service.

(d) Frequency. "Frequency" of a function periodic in time shall mean the reciprocal of the smallest increment of time for which the function repeats itself. The unit is the cycle per second or hertz.

(e) Person. "Person" shall mean a person, firm, association, copartnership, joint venture, corporation, or any entity, public or private in nature.

(f) Sound Level. "Sound level" (noise level) in decibels is sound measured using the A weighting network of a sound level meter. Slow response of the sound level meter needle shall be used except where the sound is impulsive or rapidly varying in nature in which case fast response shall be used.

(g) Sound Level Meter. "Sound level meter" shall mean an instrument including a microphone, an amplifier, an output meter, a frequency weighting networks for the measurement of sound levels which satisfies the pertinent requirements in American National Standards Institute's Specification S1.4 - 1971 or the most recent revision thereof for type S-2A general purpose sound level meters.

(h) Motor Vehicles. "Motor vehicles" shall include, but not be limited to, mini-bikes and go-carts.

(i) Sound Amplifying Equipment. "Sound amplifying equipment" shall mean any machine or device for the amplification of the human voice, music, or any other sound. "Sound amplifying equipment" shall not include standard automobile radios when used and heard only by the occupant of the vehicle in which the automobile radio is installed. "Sound amplifying equipment", as used in this chapter, shall not include warning devices on authorized emergency vehicles or horns or other warning devices on any vehicle used only for traffic safety purposes.

(j) Sound Truck. "Sound truck" shall mean any motor vehicle, or any other vehicle regardless of motive power, whether in motion or stationary, having mounted thereon, or attached thereto, any sound amplifying equipment.

(k) Commercial Purpose. "Commercial purpose" shall mean and include the use, operation, or maintenance of any sound amplifying equipment for the purpose of advertising any business, or any goods, or any services, or for the purpose of attracting the attention of the public to, or advertising for, or soliciting patronage or customers to or for any performance, show, entertainment, exhibition, or event, or for the purpose of demonstrating such sound equipment.

(l) Noncommercial Purpose. "Noncommercial purpose" shall mean the use, operation, or maintenance of any sound equipment for other than a "commercial purpose." "Noncommercial purpose" shall mean and include, but shall not be limited to philanthropic, political, patriotic, and charitable purposes.

(m) Supplementary Definitions of Technical Terms.

Definitions of technical terms not defined herein shall be obtained from the American National Standards Institute's Acoustical Terminology S1-s-1971 or the most recent revisions thereof.

Sec. Sound Level Measurement Criteria.

Any sound level measurement made pursuant to the provisions of this chapter shall be measured with a sound level meter using the "A" weighting.

Sec. Presumed Ambient Noise Level.

When "ambient noise level" is referred to in this chapter, it shall mean the higher of the following: (1) actual measured ambient noise level, or (2) presumed ambient noise level as determined from the chart below:

Zone	Time	Sound Level A, decibels		
		Community Environment Classification		
		Very Quiet (rural-suburb)	Quiet (suburb)	Slightly Noisy (suburb-urban)
R1 and R2	10pm to 7am	35	40 (45)*	45 (50)*
	" 7pm to 10pm	40	45 (55)*	50 (60)*
	" 7am to 7pm	45	50	55
R3 and R4	10pm to 7am	40	45 (50)*	50 (55)*
	" 7am to 10pm	45	50 (55)*	55 (60)*
Commercial	10pm to 7am		50 (55)*	55 (60)*
	" 7am to 10pm		55 (60)*	60 (65)*
M1	anytime		65 (70)*	65 (70)*
M2	anytime		70 (75)*	70 (75)*

Sec. Violations: Misdemeanors.

Any person violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor and upon conviction thereof, shall be fined in an amount not exceeding Five Hundred and no/100ths Dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding six (6) months, or by both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such.

Sec. Severability.

If any provision, clause, sentence, or paragraph of this chapter or the application thereof to any person or circumstances, shall be held invalid, such invalidity shall not effect the other provisions or applications of the provisions of this chapter which can be given effect without the invalid provisions or applications and, to this end, the provisions of this chapter are hereby declared to be severable.

*Sound levels recommended by Pacific Gas and Electric Company.

Article 2. Special Noise Sources

Sec. _____

Radios, Television Sets, and Similar Devices.

(a) Uses restricted. It shall be unlawful for any person within any residential zone of the City to use or operate any radio receiving set, musical instrument, phonograph, television set, or other machine or device for the producing or reproducing of sound (between the hours of 10:00 p.m. or one day and 7:am of the following day) in such a manner as to disturb the peace, quiet, and comfort of neighboring residents or any reasonable person of normal sensitiveness residing in the area.

(b) Prima facie violation. Any noise level exceeding the ambient noise level at the property line of any property (or, if a condominium or apartment house, within any adjoining apartment) by more than five (5) decibels shall be deemed to be prima facie evidence of a violation of the provisions of this section.

Sec. _____

Schools, Hospitals and Churches.

It shall be unlawful for any person to create any noise on any street, sidewalk, or public place adjacent to any school, institution of learning, or church while the same is in use or adjacent to any hospital, which noise unreasonably interferes with the workings of such institution or which disturbs or unduly annoys patients in the hospital, provided conspicuous signs are displayed in such streets, sidewalk or public place indicating the presence of a school, church, or hospital.

Sec. _____

Machinery, Equipment, Fans, and Air Conditioning.

It shall be unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise which would cause the noise level at the property line of any property to exceed the ambient noise level by more than five (5) decibels. For the purposes of this section, "noise level" shall mean measured sound level with the following values added as corrections for time duration and character of the noise.

(a) Add one and only one of the following corrections for time duration:

1. Noise persists for more than five (5) minutes out of any one hour. 0
2. Noise persists for more than one minute but not more than five (5) minutes out of any one hour. -5
3. Noise persists for one minute or less out of any one hour. -10

(b) Add one and only one of the following corrections for unusual character:

1. Noise has no unusual character.	0
2. Noise contains a piercing pure tone.	+5
3. Noise is impulsive or rattling in nature.	+5
4. Noise carries speech, music, or other information content.	+5

Article 3. Construction

Sec. Construction of Buildings and Projects.

It shall be unlawful for any person within a residential zone, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device (between the hours of _____ p.m. of one day and _____ a.m. of the next day) in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit therefor has been duly obtained from (the officer or body of the City having the function to issue permits of this kind) No permit shall be required to perform emergency work as defined in Article 1 of this chapter.

Article 4. Additional Regulations

NOTE: (The following may be of some value in some locations, may involve enforcement problems, may be added later, etc.)

Sec. Vehicle repairs (on private property in residential areas

Sec. Motor-Driven Vehicles (off-highway)

Sec. Amplified Sound (difficult to control)

Sec. Animals and Fowl (difficult to control)

Sec. 10. Train Horns and Whistles (P.U.C. contro

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I. INTRODUCTION

Since the First Extraordinary Session of 1960, the State Legislature has acted progressively to provide for a system of State Scenic Highways. In 1963, the Legislature adopted a Master Plan for State Scenic Highways, which plan has since been revised and expanded by legislative action.

Goals and objectives for the system, and pertinent planning and design standards for development of official scenic highways, have been established. Eligible highways, being those shown on the State Master Plan, may become officially designated scenic highways when the Scenic Highway Standards have been met, as follows:

1. When the roadway and right of way meet the Scenic Highway Standards, or the State has developed a plan and program to bring them up to such standards.

2. When the local jurisdiction has adopted and implemented a plan and program for the protection and enhancement of the Scenic Corridor.

Assignments of responsibilities for meeting standards by the State and local jurisdictions are set forth in the Streets and Highway Code as follows:

"The Department of Public Works (State) shall take into consideration the concept of the "complete highway", a highway that incorporates not only safety, utility, and economy but also beauty. In the development of highways, the Department will give

environment and to the highway's visual appearance. The standards for achieving official designation of eligible Scenic Highways shall also require that local governmental agencies have taken such planning actions as may be necessary to protect and enhance the scenic appearance of the corridor (the area adjacent to and outside of the highway right-of-way), including but not limited to:

- a. The regulation of land use which may include density and/or intensity of development.
- b. Detailed (specific) land and site planning.
- c. Prohibition of off-site outdoor advertising.

Highways which are eligible to become officially designated State Scenic Highways are:

1. Any highway shown on the Master Plan of "State Highways Eligible for Official Scenic Highway Designation".
2. Any County Scenic Highway which is so classified in an adopted County General Plan.

Local legislative bodies may initiate proposals to have additional highway units added to the State Master Plan, and they have the responsibility to initiate requests that the California Department of Transportation conduct corridor studies along particular highways in cooperation with local representatives.

II. PREVIOUS SCENIC HIGHWAYS PLANS

Previous General Plans of the Tri-County jurisdictions have included scenic highway proposals in the Circulation elements and have been concerned primarily with State highway routes.

A review of the State Master Plan shows most of the

eligible routes to be located in the scenic mountain and coastal regions, and with little or no coverage in the central valley regions of the State. The only portions of the State system within the Tri-County area are short bits of Routes 16 and 20 in the south-west corner of Colusa County and similar short stretches of Routes 36 and 89 in north-eastern Tehama County.

Previous area County plans have proposed additions to the State Master Plan, as follows:

1. State Highway Route 36, east and west from Red Bluff.
2. State Highway Route 261 west from Willows.
3. State Highway Route 20 west from Williams.
4. State Highway Route 45 through Colusa County to Route 32 in Glenn County, and a future extension northerly along the Sacramento River to Red Bluff. This route has been proposed as a scenic or recreation parkway, following the river and linking a series of State and local parks, and terminating in the vicinity of spawning channels, canal lift facilities and a major Federal recreation site at Red Bluff.

Various scenic County roads in foothill and mountain locations were also included in previous General Plan proposals.

III. SCENIC HIGHWAYS GENERAL PLAN ELEMENT

This plan element is based on a firm finding that the Tri-County Planning Area contains outstanding natural scenic features in its forested mountains and foothill areas, along the Sacramento River and its tributaries, around existing and future lakes and reservoirs, and along its highway routes to and through a broad variety of recreation resources ranging from National

Forest wilderness areas to State and local parks.

Additions to the State Master Plan which are proposed herein, together with proposed County Scenic Highways, form a comprehensive scenic route system which connects mountain forest areas with foothill reservoirs and valley river features, and with a strong relationship to recreation sites and facilities.

A. Scenic Highway Proposals

1. STATE HIGHWAY ROUTES, PROPOSED ADDITIONS:

- a. Route 36 West, from Red Bluff to existing Scenic Route section in Trinity County, and including future relocation around proposed Tehama Reservoir.
- b. Route 36 East, from Red Bluff to existing Scenic Route section at the junction with Route 89, and including the old highway loop at Mineral, Route 172.
- c. Route 261, west from Willows to Mendocino County line, and including future realignment across dike between the possible future Newville and Rancheria reservoirs.
- d. Route 20, west from Williams to existing Scenic Route at junction with Route 16.
- e. Route 45, from the South boundary of Colusa County, northerly along the Sacramento River to Route 32 in Glenn County and following a proposed extension on County roads and projections paralleling the Sacramento River to Red Bluff.

2. COUNTRY HIGHWAY ROUTES, TEHAMA COUNTY

- a. Long Road and Manton Road, from Dales Station on Route 36 to Manton, and to the Shasta County line.
- b. Bowman Road, and its future realignment around the proposed Tehama Reservoir to Route 36 West.
- c. Bonanza Way, and its southerly extension along Sand Slough, from Route 32 to the U.S. Fish and Wildlife Service recreation area at the diversion dam on the Sacramento River.
- d. Proposed future west side foothill road extending from the south county line northerly to Route 36, and linking the possible future Newville, Paskenta, Galatin, Schoenfeld and Tehama reservoirs.
- e. From Woodson Bridge via South Avenue, Hall Road, Hoag Road, Corning Road, and Black Butte Road to Black Butte Reservoir.

3. COUNTY HIGHWAY ROUTES, GLENN COUNTY:

- a. Southerly extension of the above described west side foothill route, from the north county line south erly along the possible future Newville, Rancheria and Colusa reservoirs to the south County line.

4. COUNTY HIGHWAY ROUTES, COLUSA COUNTY:

- a. Southerly extension of the above described west side foothill route, from the north county line west of East Park reservoir to State Route 20.
- b. Maxwell-Sites Road and its possible future relocation past the south end of Colusa reservoir to the west side foothill road.

IV. TRI-COUNTY SCENIC HIGHWAY PROGRAM

Protection of the Scenic Highway "Corridor" is the responsibility of the local jurisdiction, City or County, and such protection is largely a matter of applying appropriate land use regulation in the form of zoning within corridor areas.

Objectives of the Plan and its implementation program are to initiate a Scenic Highways designation schedule for the Tri-County area through cooperative action, and to proceed as follows:

- A. Adopt the Scenic Highways Element at the individual city, county and Tri-County levels.
- B. Coordinate individual county requests to the California Department of Transportation for corridor studies which will establish corridor boundaries.
- C. Prepare and adopt zoning provisions at the individual county levels which will provide the land use and development controls necessary to meet State Scenic Highway standards, such zoning provisions to be standardized to reasonable extents within the Tri-County area.
- D. Initiate coordinated county programs to progressively rezone as necessary within corridor areas in accordance with agreed route priorities.

Following are listings of present zoning provisions which will provide protection per State standards, and proposed new zoning provisions which will assist in making available provisions suitable for particular land and development situations.

V. SCENIC HIGHWAY CORRIDOR PROTECTION

Zoning ordinances now effective in the Tri-County area contain a variety of provisions which have regulations to meet State protective standards, as follows:

A. Existing Protective Zoning Provisions

Tehama County

U-F, Upland Forestry	P-F, Primary Floodplain
U-R, Upland Recreation	S-F, Secondary Floodplain
U-A, Upland Agriculture	P-A, Public Agency
G-R, General Recreation	O-S, Open Space
A-2, Exclusive Agriculture	S-C, Scenic Corridor
A-L-R, Agric., Limited Recreation	A-F, Agricultural Forest

Glenn County

U-F, Upland Forestry	U-A, Upland Agriculture
U-R, Upland Recreation	A-2, Exclusive Agriculture

Colusa County

U-C, Upland Conservation	E-A, Exclusive Agriculture
F-W, Floodway	G-R, General Recreation
F-P, Floodplain	

The above provisions restrict land uses and development to low density residential, agriculture, forestry, recreation, mining and similar uses. In several cases, these provisions should be reviewed, and revised where necessary, to insure clear prohibition of billboards and permit only pertinent on-site signs of limited number and size for specified uses.

Various of the above, and similar provisions, appear in City zoning ordinances and are suitable for scenic corridor protection in incorporated areas.

Additional zoning provisions which meet all or most State standards in City and County urban locations are the "R" residential zones, "PD" planned development zones, "C" neighborhood and special highway commercial zones.

Agricultural Preserve contract provisions, and complementary zoning on the extensive land areas included in preserves, meet State Scenic Highway Standards, (with a few minor exceptions).

B. Non-Protective Zoning Provisions

Commercial, industrial and other zones which permit billboards, off-site general advertising, wrecking yards, etc. do not meet State standards.

The extensive "A-1" land coverage zoning as recently amended by Glenn County, and as proposed to be amended by Tehama County, will substantially meet State standards. Such areas under "G-A" zoning in Colusa County will also meet State standards if amended as above to become consistent with General Plans.

However, in order to have available the zoning provisions necessary to provide adequate protection for the complete Scenic Highway system for the Tri-County Area, it is essential that Glenn and Colusa Counties give consideration to new zoning provisions such as have been adopted by Tehama County for use in special situations, and which are as follows:

C. Proposed Protective Zoning Provisions

(1) Chapter _____. "O-S" OPEN SPACE DISTRICTS

Art. 1: This district classification is intended to be applied to properties which are found most properly to be preserved in a natural state and/or to provide open space buffer areas in which uses are restricted to recreational, conservation or light agricultural types, and including accessory and public service uses

The following specific regulations shall apply in all "O-S" Districts.

Art. 2: USES PERMITTED

Sec. 2.1: Measures to promote conservation of soil, water and vegetation and to reduce fire and erosion hazards.

Sec. 2.2: Fire trails, riding and hiking trails.

Sec. 2.3: Public and private non-profit riding stables, parks, golf courses, tennis and swimming clubs, picnic sites.

Sec. 2.4: Crop and tree farming, grazing.

Sec. 2.5: Non-commercial boat launching and docking facilities.

Sec. 2.6: Public utility transmission and distribution lines, provided that the route of any proposed transmission line is discussed in detail with the Planning Commission prior to acquisition of right of ways therefor.

Sec. 2.7: Uses which the Planning Commission determines, by written findings, are similar to the above.

Art. 3: USES REQUIRING USE PERMITS

Sec. 3.1: Farm dwellings, mobilehomes, or travel trailers on parcels of 20 acres or more.

Sec. 3.2: Living quarters for caretakers or watchmen.

(2) Chapter _____. "P-A" PUBLIC AGENCY DISTRICTS

Art. 1: This district classification is intended to be applied to properties which are properly used for, or are proposed to be used for public or public service purposes, or for specified public utility purposes.

The following specific regulations shall apply in all "P-A" Districts.

Art. 2: USES PERMITTED

Sec. 2.1: Public schools, parks and recreation areas, fair grounds, civic centers and similar sites and uses, public forest and reservoir areas, historical sites and monuments.

Sec. 2.2: Sites and uses which the Planning Commission determines by written findings are similar to the above.

Sec. 2.4: Uses and structures which are incidental or accessory to permitted uses.

Art. 3: USES REQUIRING USE PERMITS

Sec. 3.1: Public or non-profit cemeteries and similar uses.

Sec. 3.2: Public or non-profit refuse disposal areas, corporation yards, sewage treatment facilities.

Art. 4: PERMITTED PUBLIC UTILITY USES

Sec. 4.10: When the letter symbol "-U" is added to the "P-A" symbol to create "Public Agency-Utility Districts", the following uses shall be permitted in such districts:

Sec. 4.11: Public utility warehouse and storage yards, pole yards, gas holders, substations, electric generating plants and transmission and distribution lines, provided that the route of any transmission line is discussed in detail with the Planning Commission prior to acquisition of right of ways therefor.

Sec. 4.12: Public utility uses which the Planning Commission determines by written findings to be similar to the foregoing.

(3) Chapter _____. "S-C" SCENIC HIGHWAYS COMBINING DISTRICT

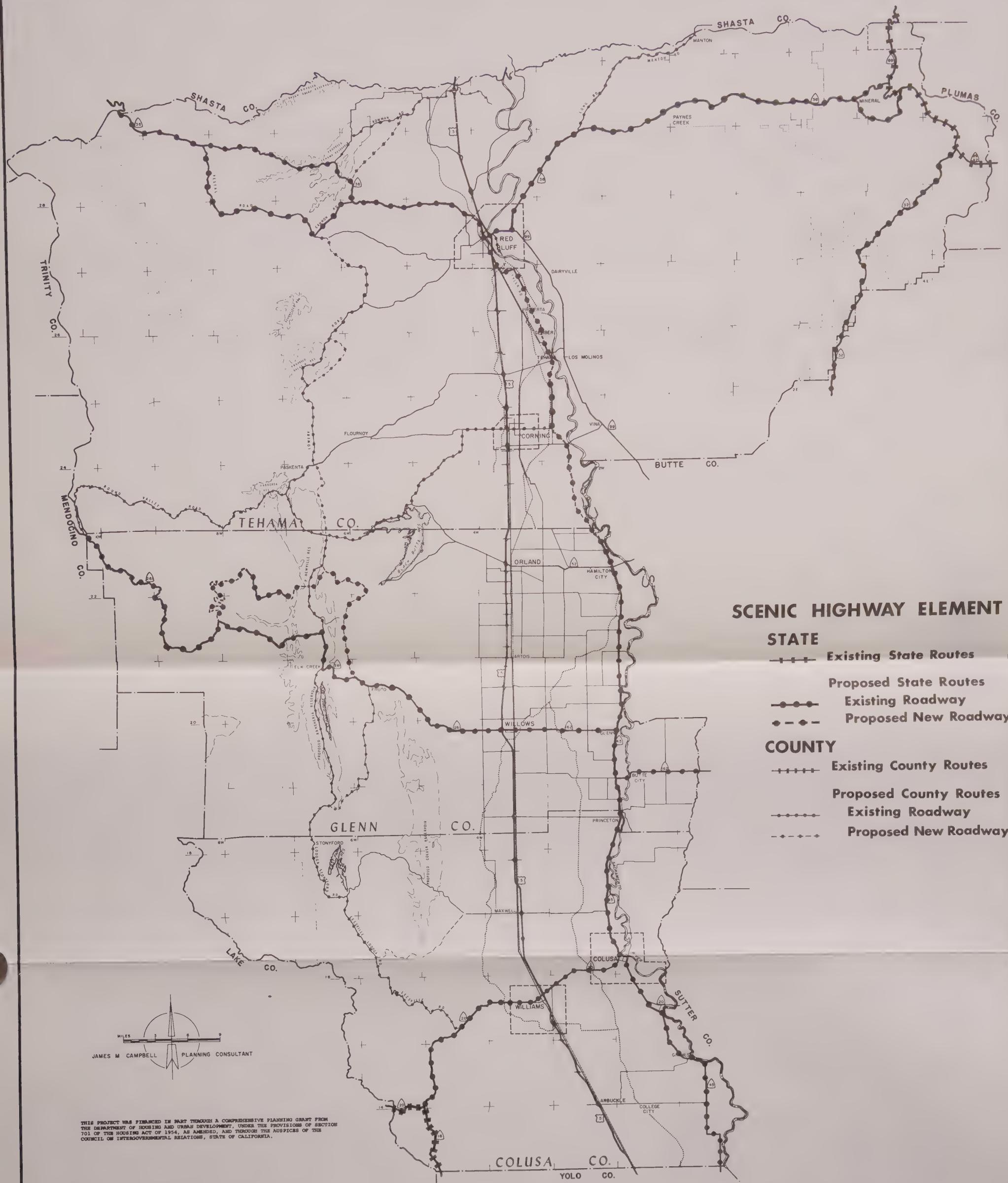
Art. 1: This district classification is intended to be applied to land areas which are adjacent to roads and highways which are classified as Scenic Highways, or which are proposed as such on the General Plan, and which require the particular protection provided by this Chapter to preserve their scenic qualities and the public interest therein.

Art. 2: SPECIAL "S-C" DISTRICT REGULATIONS:

Sec. 2.1: In any district with which the "S-C" district classification is applied, the regulations of the basic district shall apply, except that a Use Permit shall be required for all uses other than permitted single-family and agricultural uses, and public utility distribution lines.

Sec. 2.2: In considering Use Permit applications as provided in this section, the Planning Commission shall relate such applications to design standards for scenic highways prepared by the California Department of Transportation, to any precise plan or special standards adopted for any particular scenic highway or portion thereof, and to the particular scenic or esthetic conditions which may be affected by the proposed use.

Sec. 2.3: Any "S-C" district shall be deemed to extend 200 feet from the road or highway it adjoins unless defined by zone map or description.



U.C. BERKELEY LIBRARIES



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